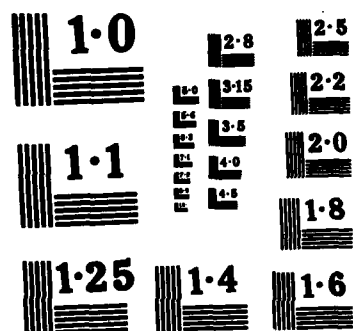


AN ANALYSIS OF THE EFFECTS OF VARYING MALE AND FEMALE
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March 1985

United States Air Force
Personnel Force Composition Study:

An Analysis of the Effects of Varying Male and Female Force Levels

ANNEX ONE:

**A Model
to Simulate the Expected Mix
of Men and Women
for Air Force Enlistment**

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prepared for the
**USAF Special Study Team
Headquarters,
United States Air Force**

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FINAL REPORT - VOLUME I

**A MODEL TO SIMULATE
THE MIX OF MEN AND WOMEN
FOR AIR FORCE ENLISTMENT**

FEBRUARY 1, 1985

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FOR SUBMISSION TO:

**AF/MPZ SPECIAL STUDY TEAM
THE PENTAGON
WASHINGTON, D.C. 20330-5060**



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PREFACE

This report, A Model to Simulate the Mix of Men and Women for Air Force Enlistment, constitutes the first of three volumes, and was prepared in partial fulfillment of Air Force Contract No. F49642-84-D0038, by Syllogistics, Inc. Captain Daniel L. Burkett II, USAF, AF/MPZ Special Study Team, monitored this endeavor.

Thanks are extended to Captain Daniel L. Burkett II, and to Colonel Douglas A. Patterson for providing their professional support and guidance to this effort. Special thanks are also extended to Dr. Brian Waters, Human Resources Research Organization, for expert performance and input as subcontractor to Syllogistics. The author also wishes to recognize the timely and efficient manner in which Ms. Helen Hagen, Mr. Les Willis, and Mr. Robert Brandewie of the Defense Manpower Data Center responded to requests for data. A final note of appreciation is extended to the Syllogistics secretarial staff for superior word-processing support; Ms. Dottie Norton, Ms. Teresa Hunter, and Ms. Donna Schoonover.

The views and opinions expressed in this report are those of the authors and should in no way be interpreted as an official position, policy, or decision of any Government Agency, unless so designated by other official documentation.

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EXECUTIVE SUMMARY

A primary objective of the USAF Special Study Team is to develop a sound methodology for determining the mix of male and female accessions. In support of this objective Syllogistics was tasked to develop an enlistment model which would do this. This Volume presents the development of that enlistment model. The model is designed to reconcile Air Force requirements with enlistment-age 18 to 23 population attributes and availability. The model forecasts expected enlistment mixes, by sex, by Air Force Specialty (AFS), given estimates of: Air Force enlisted requirements; individual ability to qualify for enlistment by AFS; and individual interest in serving in the military.

Qualification for enlistment by AFS is a fundamental underpinning of the model. With respect to mental aptitude, we believe robust forecasts of the mental qualification of men and women is assured through use of the 1980 Profile of American Youth data base, the definitive, nationally representative mental aptitude sample of American youth ages 18 to 23. The Profile of American Youth data base has been used to establish the norms for the military enlistment examination.

Physical and moral qualification rates, by sex, were derived by combining the best available data sources, and we believe the resulting rates represent the best approximation available. Robust forecasts of the supply of physically and morally qualified men and women can be better assured through a timely future research effort to develop a national physical/moral qualifications data base equivalent in quality to that provided for mental aptitude by the Profile of American Youth.

Model measures of individual interest and willingness to serve in the military are soundly based upon the Youth Attitude Tracking Survey (YATS). To better understand the large difference between male and female positive pre-disposition to military service we examined components of the Ohio Vocational Interest Survey (OVISIT), as well as comparative data on high school seniors developed by the National Center for Education Statistics.

↓
In sum, this report specifies a person-job assignment model simulating a nationally representative Air Force specialty^(AFS) assignment process for male and female 18 to 23 years olds in the national manpower pool qualified and willing to serve in the Air Force. The model has a robust capability to forecast results by AFS given variations in any major element of either Air Force accession requirements, or the characteristics of the available supply of qualified men and women. Recognizing this important ability to vary major parameters in future applications, the results of all factors and data elements prescribed by the project sponsor for preparation of this current report, may be summarized as follows:

the report contains general data by AFSC.

- ✓ In general, each of the results indicate a higher net qualification/willingness-to-enlist rate for males than for females.
- ✓ A higher percentage of males meet Air Force basic mental/education requirements.
- ✓ Males tend to score higher on the Mechanical, Electronic and General composites.

- Females outscore males on the Administrative composite; .
- Males have a higher moral/administrative disqualification rate, about 3 to 1 of that for females;
- A higher percent (approximately 10%) of males are able to pass the minimum medical requirements; .
- Female qualification is substantially affected by AFSC-specific physical requirements;
- Increased "X" factor physical requirements decrease female qualification; .
- Males, at present, are almost two and one half times as willing to enlist than their females' cohorts".

The model estimates a total Air Force accession distribution of 84.81% male and 15.18% female, based on anticipated FY 1985 accessions. Results will vary given different AFS accession requirements. By partitioning AFSs into their respective aptitude requirements, however, the within-AFS distributions are significantly different from the total Air Force distribution. Mechanical and Electronic AFSs are predominantly male (92.99% and 88.47%, respectively), while women are represented heaviest in Administrative (29.69%) and General (18.07%) aptitude area AFSs.

It is important to note that the model was designed to estimate unconstrained qualification -- unconstrained in the sense that only documented standards are used to qualify individuals. Furthermore, the model results are equated across sex and racial/ethnic categories in order to account for differential interest in enlisting. Therefore, all individuals estimated as qualified and willing to enlist are considered to be equally as willing to enlist and subsequently, equally as (easy/difficult) to recruit. Deviation from the estimated male/female mix necessarily are non-optimal in the sense that they require increased resources to sustain.

The report beginning on the following page presents the detailed specification of the model, and the resulting basis for the conclusions summarized above.

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SECTION 1

INTRODUCTION

A primary objective of the USAF Special Study Team is to develop a sound methodology for determining the mix of male and female accessions in an unconstrained environment. In support of this objective, Syllogistics was tasked to develop an enlistment model which would do this. Our approach was to mathematically reconcile Air Force requirements with enlistment-age population attributes and availability. Also, it was required that the model provide the Air Force with the capability to forecast expected enlistments, by sex, by Air Force Specialty (AFS), given estimates of Air Force requirements. The model is developed in three stages: first, the conceptual framework is established; second, the conceptual framework is specified mathematically; and, lastly, the best available data are used to derive actual estimates of equilibrium values of enlistment supply and enlistment demand. An excursion is undertaken to examine the model's sensitivity changes in individual interest of females in enlisting in the military.

SECTION 2

THE MODEL

The Air Force accession process is both complex and dynamic, the outcome of which is largely dependent upon the interaction between recruiters and potential enlistees given that, at any one point in time, an individual is either qualified or not qualified for accession into the armed services. Recruiters, for their part, do not know whether an individual is fully qualified until the individual is fully examined at a Military Entrance Processing Station (MEPS). This means that, as part of a focused recruiting effort, a recruiter may spend time trying to recruit an individual who will subsequently be found unqualified. Moreover, recruiters may fail to actively recruit individuals who would subsequently be proven qualified. Furthermore, individuals who are qualified may not be interested in enlisting. Actual accessions are, therefore, a function of these behaviors and do not necessarily represent precisely what the accession pool might or could look like.

To qualify for enlistment into the Air Force, an individual must meet or exceed the prevailing minimum mental, educational, medical and moral standards. After being determined qualified for Air Force enlistment, an individual must be assigned a job called an Air Force Specialty (AFS). To be qualified for an AFS an individual must meet or exceed the AFS's mental and medical minimal entry standards. Actual assignment to an AFS is usually done at the MEPS by an Air Force representative. In practice, every AFS is not open to qualified individuals at any one point in time. The Air Force uses a Person Job Matching (PJM) system to determine available AFSs for a given individual at a given point in time. The AFSs available are determined in consideration of such factors as:

current Air Force manpower requirements, availability of training seats, and optimization of individual AFS preference to AFS demand and supply. Even though Air Force requirements tend to be specified in terms of Fiscal Years, the PJM attempts to establish a controlled flow of daily accessions in order to meet the technical training school start date requirements and field vacancies which vary during the year. In sum, they will add up to the annual accession requirement.¹

This assignment process significantly affects efforts to estimate AFS-level accessions since individuals could very well qualify for an AFS not available at particular points in time. Consequently, any attempts to estimate potential AFS-level accession pools must be primarily concerned with estimating full-potential, i.e., undistorted by non-qualified and related managerial or policy effects.

A desired accession model would focus primarily upon individual likelihoods of being both qualified and interested in Air Force enlistment to determine supply estimates; and upon Air Force quantitative accession requirements to determine estimates of demand. Lastly, the model must be able to reconcile available supply to actual demand.

2.1 MATHEMATICAL SPECIFICATION

The model is required to estimate four values, given here as:

- The probability of the i th person being qualified for the j th AFS (Q_{ij});

¹ Actual assignment is made to either a specific AFS or to one of the four open aptitude areas.

FIG 3-1. CUMULATIVE DISTRIBUTION OF
MECHANICAL SCORES

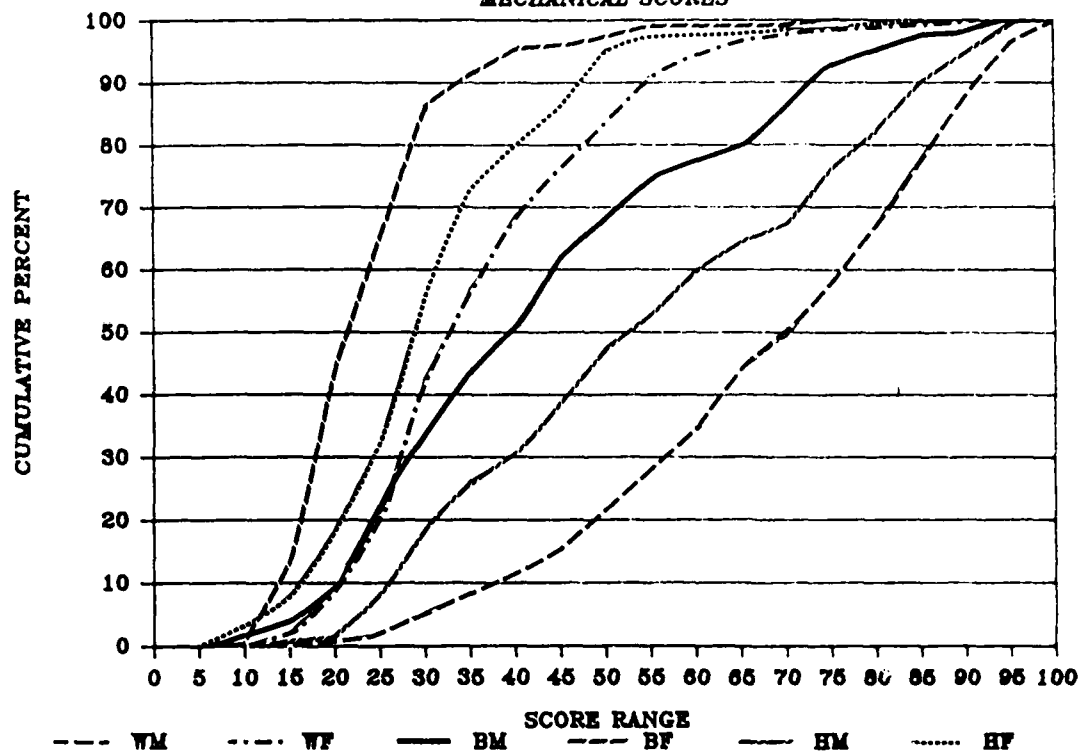
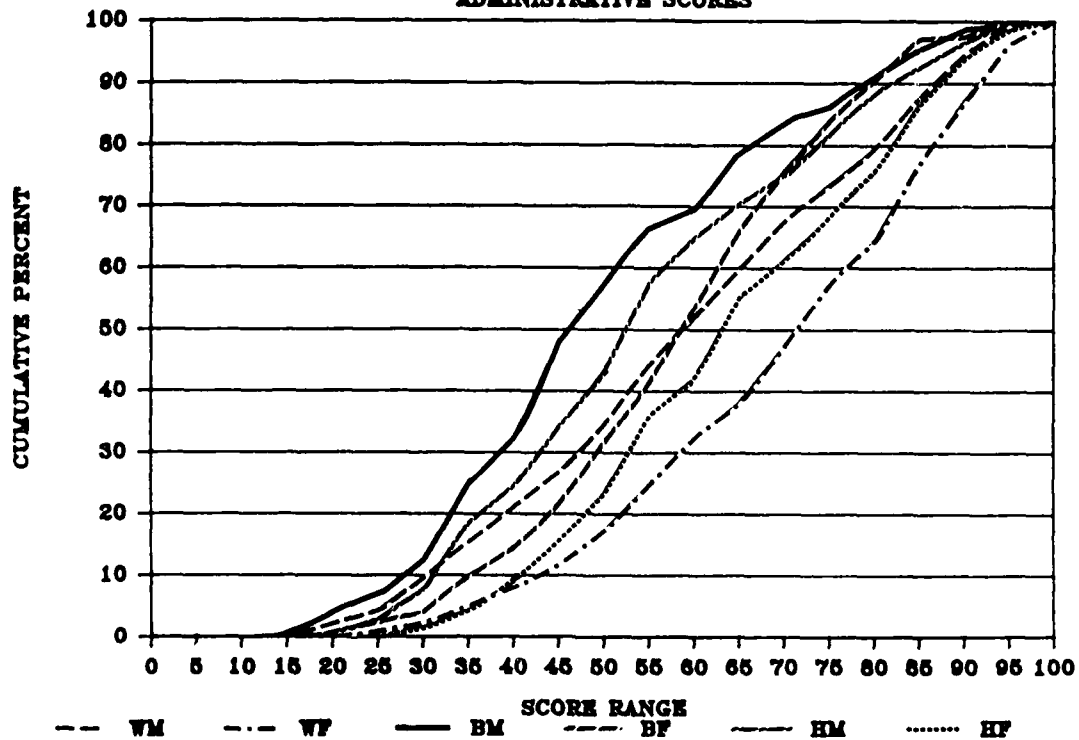


FIG. 3-2. CUMULATIVE DISTRIBUTION OF
ADMINISTRATIVE SCORES



associated with successful AFS training, and a set of physical health requirements.

The Air Force uses four measures designed to assess the probability of training success. These measures are given as composite scores derived from certain subtests of the Armed Services Vocational Aptitude Battery (ASVAB). The composites are grouped into four categories: Mechanical (M), Administrative (A), General (G), and Electronic (E). Typically, AFSC job descriptions which contain equipment repair duties will have a minimum M and/or E score requirement(s), while AFSCs which are more clerical in nature will usually have minimum A score requirements, etc. The composites and minimum scores have been validated to be good measures of successful training.¹

The M, A, G, and E score distributions of those individuals from meeting the first-level qualification are depicted as cumulative probability distributions in Figures 3-1 through 3-4. In general, the "lower" (i.e., closer to the lower right quadrant) the cumulative distribution line, the "higher" the relative category class performance. Intercepts with the cumulative 50 percent mark define category median scores of individuals qualified for Air Force entry (physical and moral qualifications not considered).

1

For a more detailed discussion of these and other Air Force entry standards, see Screening for Service: Aptitude and Education Criteria for Military Entry, Office of Assistant Secretary of Defense (Manpower, Installations and Logistics), September 1984.

TABLE 3-2

**NUMBER OF PERSONS QUALIFIED AT FIRST-LEVEL
FOR MINIMUM AIR FORCE MENTAL AND EDUCATIONAL REQUIREMENTS***

SEX	WHITE	BLACK	HISPANIC	TOTAL
Male	5,725,330	260,311	227,833	6,213,474
Female	5,375,948	260,621	157,116	5,793,685
Total	11,101,278	520,932	384,949	12,007,159

Source: Profile of American Youth, 1980.

* Includes all 18 to 23 year old, non-institutionalized persons with less than three years college completed.

TABLE 3-3

**FIRST-LEVEL QUALIFICATION RATES
AS PERCENT OF BASE POPULATION AGE 18 TO 23**

SEX	WHITE	BLACK	HISPANIC	TOTAL
Male	55%	15%	29%	48%
Female	54	15	21	46
Total	55%	15%	25%	47%

Source: Profile of American Youth, 1980.

In general, the results indicate that about half of the original base population fulfill these requirements, but that the individual sex-racial/ethnic qualification rates are significantly different. These differences are attributable to the different AFQT and G score distributions of each category.

Individuals that meet first-level entry requirements are further evaluated with respect to meeting AFS-specific requirements. Two general sets of requirements exist for each AFS; a mental, or cognitive, requirement which is

The base population was then adjusted by excluding individuals who had completed at least three years of college. This was done so that the mental score distributions would not be biased by the inclusion of individuals who will most likely not consider enlistment. This is not to say that these same individuals would not be interested in military service but this participation rate is very low.¹

First-level Air Force enlistment qualification is simulated by applying minimum Air Force entry standards to the remaining base population. Current Air Force entrance standards prescribe a minimum score on the Armed Forces Qualification Test (AFQT) of 21 for high school graduates and 65 for non-high school graduates and 50 for GEDs (General Education Development Certificate of Equivalency). Furthermore, a minimum score of 30 on the General (G) composite and a combined Mechanical (M), Administrative (A), General (G), and Electronic (E) score of at least 120 is required. Individuals who did not meet these criteria were removed from further consideration. The results of this first-level qualification are presented below in Table 3-2. For example, 5,725,330 white males ages 18 to 23 are expected to meet or exceed the minimum Air Force mental and educational requirements and have not completed three or more years of college. Table 3-3 contains the first-level qualification rates which were derived by expressing Table 3-2 as a percentage of Table 3-1. For example, 55% of the 18 to 23 year old white males (5,725,330 divided by 10,380,500) are expected to be considered qualified at the first-level.

1

Essentially all commissioned officer accessions possess at least a Baccalaureate degree and, hence, come from this group. Officer accessions are discussed separately in Section 5, Conclusion.

3.2 MINIMAL MENTAL QUALIFICATION

For purposes of this study, the base population is defined to consist of the entire 18 to 23 year old, non-institutionalized, United States population. Estimates of the base population were obtained from the Profile of American Youth Survey.

Table 3-1 presents the 1980 estimates of the base population as given by The Profile of American Youth. For example, there are an estimated 10,380,500 white males ages 18 to 23 in the civilian non-institutionalized population. Air Force minimum qualifying enlistment standards were applied to this base population in order to estimate sex and racial/ethnic distributions. Essentially, three levels of qualification are applied: 1) minimum educational and mental, 2) job-specific mental, and 3) job-specific physical qualification.

TABLE 3-1

ESTIMATES OF BASE POPULATION AGE 18 TO 23
BY SEX AND RACIAL/ETHNIC DISTINCTIONS

SEX	WHITE*	BLACK	HISPANIC	TOTAL
Male	10,380,500	1,733,000	777,600	12,891,200
Female	10,014,100	1,737,200	766,600	12,517,900
Total	20,394,600	3,470,200	1,542,200	25,409,000

Source: Profile of American Youth, 1980.

*White includes all non-black, non-Hispanics.

approximation available.¹ The derived estimates of physical qualification rates are applied to the mentally qualified population to determine size estimates of the pool of both mentally and physically enlistment-qualified youth.

Under the conditions of an all voluntary military, it is necessary to consider youth's predisposition or willingness to enlist in order to construct realistic enlistment supply estimates. Therefore, consideration is given to such factors as: 1) differences in perceived difficulty of finding a job, 2) importance and availability of desired job characteristics as found in the military, 3) work preferences, 4) employment patterns in the civilian sector, and 5) composite indications of intentions to serve as measured by attitudinal surveys. Specific attention is directed towards determining differences between males and females with regard to the aforementioned factors. Composite indications of preference for military service are then used to further restrict the qualified pool so that it represents individuals both qualified and predisposed toward military service and, therefore, more closely approximates the ultimate pool from which Air Force is likely to draw NPS accessions.

Estimates provided by the Air Force of job-specific accession size requirements are used to define enlistment demand. Demand is reconciled with supply via the mathematical model designed to be free from selection discrimination other than that attributable to entry and job requirements. Expected values of sex-racial distributions are then derived. The model, as well as its output, will assist the Air Force in implementing a sound methodology for determining male and female accessions.

1

Volume II, Section 4, documents how historical studies by Bernard Karpinos were combined with studies conducted by the National Opinion Research Center and the 1974 Health and Nutrition Examination Survey (HANES-I) to derive physical qualification rates.

SECTION 3

THE DATA

3.1 OVERVIEW

A primary objective of the USAF Special Study Team is to develop a sound methodology for determining enlisted male and female NPS accessions. In support of this objective, Syllogistics, Inc., was tasked to provide supply estimates, by sex, for Air Force job areas. We determined, after extensive research, that the supply estimates could best be measured by applying Air Force minimum-entry standards, as well as job-specific mental and physical requirements to the American 18 to 23 year old, non-institutional population. 18 to 23 year olds were chosen because most NPS accessions are in this age range, and use of this range allowed us to apply the Profile of American Youth data base. The 1980 Profile of American Youth was used as the primary data base for this effort since it is the definitive source of mental aptitude scores for a nationally representative sample of American youth, ages 18 to 23.

Air Force minimum and job-specific physical requirements are clearly documented.¹ However, there exists no nationally representative sample of American youth which contains physical health characteristics comparable to those examined by the Air Force. Therefore, physical qualification rates were derived by combining several data sources so that they represent the best

¹

Air Force Regulation 39-1; Enlisted Personnel, Airmen Classification.

WM* = White Males
 WF* = White Females
 BM = Black Males

BF = Black Females
 HM = Hispanic Males
 HF = Hispanic Females.

* Whites include all non-Blacks, non-Hispanics.

The data analysis section clearly documents the differences across these distinctions and, therefore, justifies their use.

The model is now fully specified. The next section uses actual data to estimate equations:

$$6) \quad Q_{kj} = FLQR_k * MED_{kj} * QMAGE_{kj} * MORAD_k$$

$$7) \quad QMA_{kj} = Q_{kj} * WILLING_{kj}$$

$$8) \quad AFSDIST_{kj} = QMA_{kj} / \sum_k QMA_{kj}$$

$$9) \quad AF\%_k = \sum_j w_j (AFDIST_{kj}).$$

Equation 5) can now be expressed as;

$$6) \quad Q_{kj} = FLQR_k * MED_{kj} * QMAGE_{kj} * MORAD_k$$

and equation 2) can be respecified as;

$$7) \quad QMA_{kj} = Q_{kj} * Willing_{kj}$$

The distribution of (kth) individuals across the jth AFS (AFSDIST_{kj}) is determined as:

$$8) \quad AFSDIST_{kj} = QMA_{kj} / \sum_k QMA_{kj}.$$

In order to calculate the distribution of k individuals within the entire modeled accession pool it is necessary to weight each AFSDIST_{kj} by the percentage of total accessions represented by the jth AFS, summing the results across all j AFSs.

$$9) \quad AF\%_k = \sum_j w_j AFSDIST_{kj}$$

where,

$$w_j = \text{Accession Requirement}_j / \sum_j \text{Accession Requirement}_j$$

As was mentioned earlier, significant reductions in data requirements can be made by clustering similar individuals into groups. For our purposes, the model must at least be stratified by sex in order to ascertain male and female accession distributions. The model is further stratified to accommodate known differences across racial and ethnic distinctions in AFQT, MAGE and interest measures. The model's groupings are given here as:

likely to bias the results since they tend to have significantly higher aptitude scores.

Medical qualification is represented by two components which are likely to be correlated with each other. Therefore, AFS-specific medical requirements are calculated for only those persons (groups) minimally medically qualified for Air Force enlistment. $MEDICAL_{kj}$ is then replaced with AFS-specific medical qualification rates at the given minimum Air Force medical qualification ($MEDICAL_{kj} MEDICAL_k$). Medical qualification is assumed to be independent of all other variables.

AFS mental qualification is calculated for only those persons in the first-level qualification pool. Moral and Administrative qualification are assumed to be independent with respect to all other variables. Equation 3) can now be respecified as:

$$5) Q_{kj} = FLQR_k * MAGE_{kj} FLQ_k * MEDICAL_k * MEDICAL_{kj} MEDICAL_k * MORAD_k$$

where,

$FLQR_k$ = First Level Qualification Rate_k;

$MAGE_{kj} FLQ_k$ = AFS_j MAGE qualification rate given first-level qualified;

and all other variables have been previously defined.

Some additional definitions are given in order to simplify the equations.

$$MED_{kj} = MEDICAL_k * MEDICAL_{kj} MEDICAL_k$$

$$QMAGE_{kj} = MAGE_{kj} FLQ_k$$

qualified, an AFS qualification. The model is defined only for 18 to 23 year old, non-institutional, non-prior service youth.¹ These persons, and only these persons are then evaluated with respect to the following restrictions:

(AFQT_{E₁}) \geq 65 for non high school graduates
 \geq 50 for graduation equivalency degree (GED)
 \geq 21 for high school graduates

Composite (MAGE₁) \geq 120

General Composite (G₁) \geq 30

All persons meeting these joint restrictions will be further evaluated; all others are removed from further consideration. This process is referred to herein as first-level qualification.

A further restriction is imposed on the first-level qualification population. All persons with more than two years of college completed were removed from further consideration. This was done to account for the fact that near-college graduates (\geq 3 years completed) score significantly higher on aptitude measures and yet are significantly less available for enlistment. Less than 5% of 18 to 23 year old Air Force NPS accessions have completed more than two years of college.² While some persons with more than two years of college completed do indeed enlist, the inclusion of all near-college graduates is

1

18 to 23 year olds represent about 90% of all non-prior service enlistments as determined by special tabulations prepared by the Defense Manpower Data Center, 1984.

2

Based on unpublished data from Defense Data Manpower Data Center, 1984.

Grouping individual probabilities into average probabilities requires either an assumption of variable independence in order to estimate the dependent variables Q_{kj} and QMA_{kj} efficiently, or separate estimation of joint effects. For example, if 25 percent of the total population are green-eyed and 25 percent of the total population were red-haired, then 12.5 percent of the total population is expected to be both red-headed and green-eyed if, and only if, hair color were to be independent of eye color. The assumption of independence in this case would contradict the fact that hair color and eye color are known to be related. If all green-eyed persons had red hair and vice versa, then, given the population prevalence for red hair and green eyes as above, 25% of the total population would be both red-haired and green eyed. Joint estimates are required for variables that are functionally related.

In the case of the supply model specified thus far -- equations 3) and 4) -- it would be incorrect to assume that all of the variables were functionally independent. For example, age and education level are significantly related to AFQT.¹ Furthermore, AFQT scores are correlated with MAGE scores. Other relationships are likely to exist, such as level of qualification and willingness to enlist.

In order to account for some of these relationships the model is broken into two qualification stages: a basic Air Force qualification and, of those

1

Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics); Profile of American Youth, March 1982.

$$2) \quad QMA_{ij} = Q_{ij} * Willing_{ij}$$

where,

Willing_{ij} = 0 if the individual is not willing to enter AFS_j,
 1 if the individual is willing to enter AFS_j.

Therefore, for a given AFS(j), *n* individual(i) is considered both qualified and willing to enlist in AFS(j), if and only if, $QMA_{ij} = 1$. In order to solve these equations, every member of the national population would have to be screened for service. A significant reduction in data requirements can be made by simply clustering individuals into similar groupings. The model can easily be adjusted to allow for clustering by respecifying equations 1) and 2) as:

$$3) \quad Q_{kj} = A_k * AFQT_{E_k} * MAGE_k * MAGE_{kj} * G_k * MEDICAL_k * MEDICAL_{kj} * MORAD_k$$

and

$$4) \quad QMA_{kj} = Q_{kj} * WILLING_{kj}$$

where,

k = group (*k* = 1, 2, 3, ..., *N*)

N = population size

The probabilities are binary only for the case of *k* = *N*, i.e., the individual-level case. For all other cases the probabilities become group probabilities and are allowed to range between 0 and 1. Each group probability is given by the average probability of all *i* probabilities belonging to the *k*th group.

- The probability of the i th person being both qualified and willing to enter the j th AFS (QMA_{ij});
- The percentage of the j th AFS comprised of i -individuals ($AFSDIST_{ij}$); and
- The percentage of Air Force accessions comprised of i -individuals ($AF\%_i$).

AFS qualification is determined by equation 1) below:

$$1) Q_{ij} = A_i * AFQT_{E_i} * MAGE_i * MAGE_{ij} * G_i * MEDICAL_i * MEDICAL_{ij} * MORAD_i$$

where,

- A_i = 0 if not eligible age,
1 if eligible age;
- $AFQT_{E_i}$ = 0 if not AFQT qualified given education level,
1 if AFQT qualified given education level;
- $MAGE_i$ = 0 if not MAGE qualified for AF,
1 if MAGE qualified for AF,
- $MAGE_{ij}$ = 0 if not MAGE qualified for AFS $_j$,
1 if MAGE qualified for AFS $_j$;
- G_i = 0 if General composite score less than required minimum,
1 if General composite score greater than or equal to required minimum,
- $MEDICAL_i$ = 0 if not medically qualified for entry,
1 if medically qualified for entry;
- $MEDICAL_{ij}$ = 0 if not qualified for AFS $_j$ medical requirements,
1 if medical qualified for AFS $_j$;
- $MORAD_i$ = 0 if not qualified for moral (administrative) reasons,
1 if morally qualified;

Note: Specific qualification requirements as they pertain to these variables will be discussed in Section 3, The Data.

Willingness to enter both the Air Force and each AFS are combined with equation 1) to produce equation 2), the probability of any individual being both qualified and willing to enter the j th AFS.

FIG 3-3. CUMULATIVE DISTRIBUTION OF
GENERAL SCORES

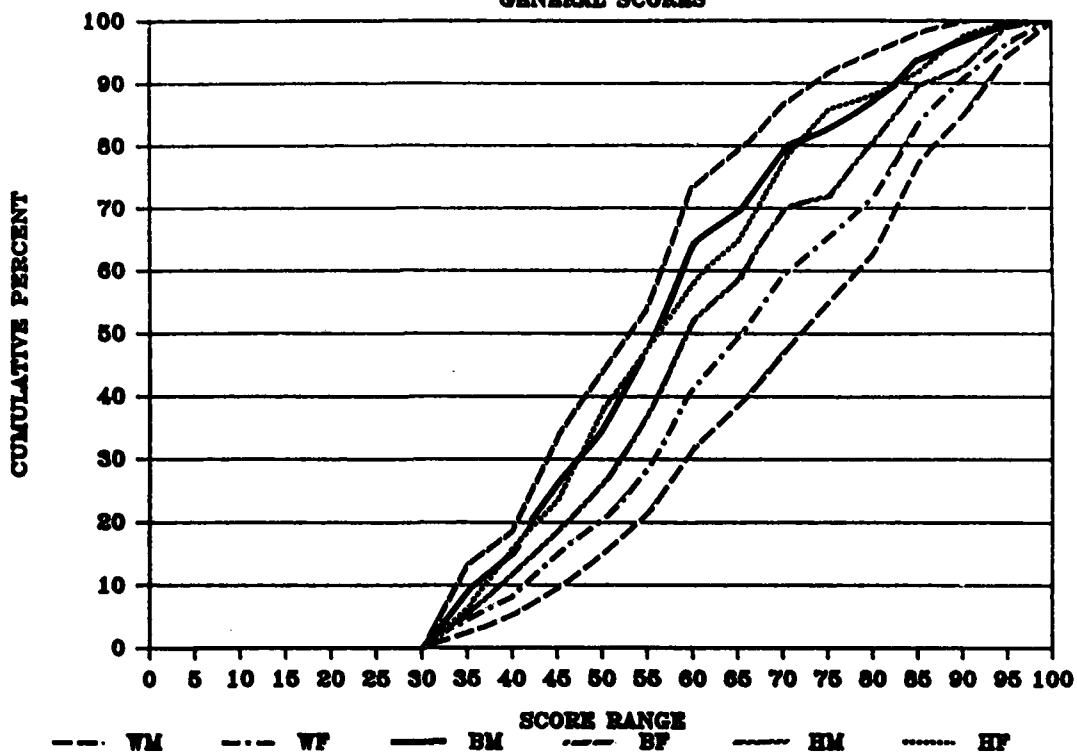
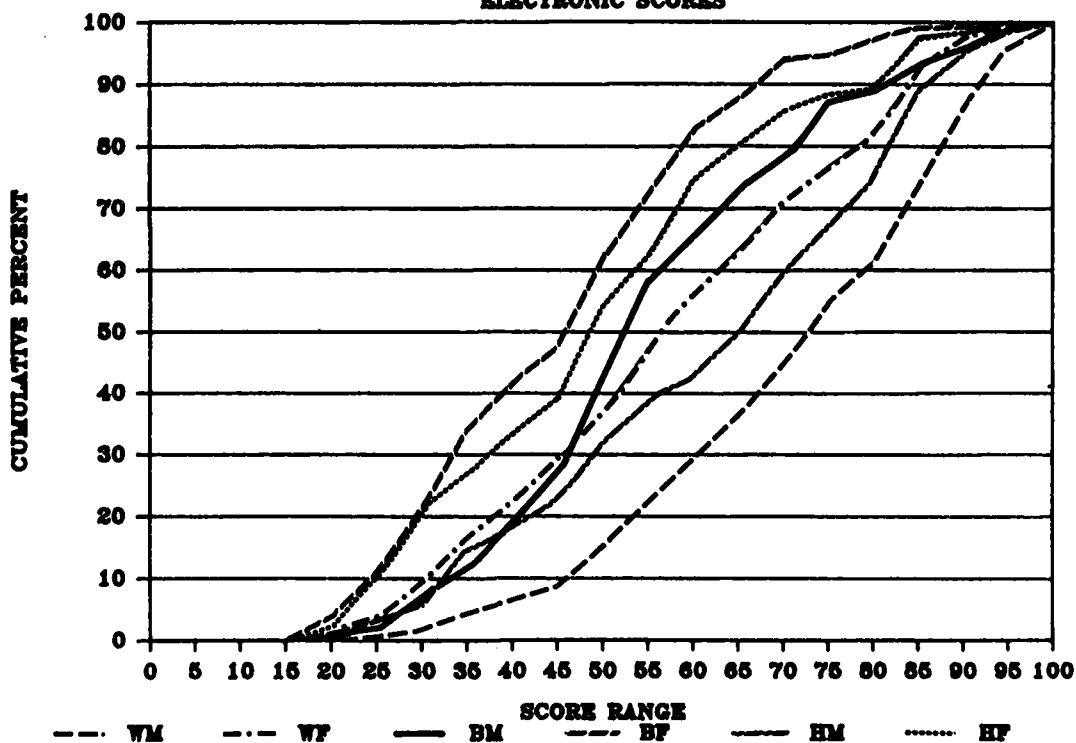


FIG 3-4. CUMULATIVE DISTRIBUTION OF
ELECTRONIC SCORES



The effects of the dispersion in distributions can be seen by considering the category qualification rates within specific AFSs. For each aptitude area, M, A, G and E, mental category qualification rates are presented for a specific AFS in that aptitude area.¹

In order to support relative comparisons, the AFSs used for illustration were selected such that their minimum aptitude scores were equal. A minimum score of 35 was the common requirement. Differences in score performance are least pronounced at the lower end of the distribution. It should be kept in mind that differences are most pronounced at higher score levels. As an illustration, consider Air Force Specialty Code (AFSC) 552X0, Carpentry Helper, which has a minimum Mechanical aptitude score requirement of 35. The category qualification rates for this AFSC are given below in Table 3-4. For example, 91.7% of the white males qualified for first-level minimum mental and educational requirements are expected to have an M score \geq 35.

TABLE 3-4

MENTAL QUALIFICATION RATES FOR M SCORE \geq 35
AFSC 552X0 - CARPENTRY HELPER *
(PERCENT)

SEX	WHITE	BLACK	HISPANIC	TOTAL
Male	91.7	56.6	73.8	89.5
Female	43.5	8.6	27.0	41.5
Total	68.3	32.6	54.7	66.3

Source: Profile of American Youth, 1980.

*Includes only those persons meeting first-level entry requirements as defined within this report.

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AFSs were categorized into aptitude areas on the basis of the aptitude area minimum requirements for an AFS. AFSs with multiple area score requirements were categorized to be associated with the lower score's area for "or" multiples and the higher score for "and" multiples.

In general, Mechanical aptitude scores screen out females more than males, blacks more than Hispanics, and Hispanics more than whites. The cumulative distribution is shown in Figure 3-1.

Similar differences are present in the Electronic composite score distribution. Figure 3-4 graphically depicts the cumulative distributions. Table 3-5 shows the qualification rates for an AFS with an Electronic minimum score requirement of 35, AFSC 404X0, Precision Imagery & Audio-Visual Media Maintenance Helper.

TABLE 3-5

MENTAL QUALIFICATION RATES OF PERSONS FOR E SCORE 35
AFSC 404X0 - PRECISION IMAGERY & AUDIO-VISUAL MEDIA
MAINTENANCE HELPER *
(PERCENT)

SEX	WHITE	BLACK	HISPANIC	TOTAL
Male	95.8	88.3	85.4	95.1
Female	83.5	66.2	73.2	82.4
Total	89.8	77.2	80.4	89.0

Source: Profile of American Youth, 1980.

*Includes only those persons meeting first-level entry requirements as defined within this report.

Males tend to qualify at higher rates than females and whites qualify higher than Hispanics and Hispanics higher than blacks. The results are significantly different for E scores higher than 45 as can be seen in Figure 3-2. For example, for all E scores higher than 45 white females, as a group,

score higher than black males. This fact will significantly impact the percentage of black males in the modeled force composition due to the large size of the first-level qualified white female population relative to that of black males.

Figure 3-2 graphically depicts the Administrative score distributions. In general, females score higher than their male counterparts and, similar to the previous cases, whites score higher than Hispanics and Hispanics score higher than blacks. For example, consider the case of an AFS that has a minimum Administrative requirement of $A \geq 35$, AFSC 605X0, Air Passenger Helper. The percentages of each category that qualify for this restriction are given in Table 3-6.

TABLE 3-6

MENTAL QUALIFICATION RATES FOR A SCORE ≥ 35
AFSC 605X0 - AIR PASSENGER HELPER *
(PERCENT)

SEX	WHITE	BLACK	HISPANIC	TOTAL
Male	84.6	75.3	81.4	84.1
Female	95.2	89.9	95.7	95.0
Total	87.2	82.6	87.2	89.4

Source: Profile of American Youth, 1980.

*Includes only those persons meeting first-level entry requirements as defined within this report.

AFSCs which have Administrative score requirements will then tend to be more open to females than to males. Also, similar to the previously noted trends, whites qualify at the same or higher rates for Administrative AFSCs than do Hispanics and Hispanics qualify at higher rates than do blacks.

Differences across categories are less significant with respect to General (G) composite score distributions. Figure 3-3 graphically depicts these distributions. Note that no individuals will have General scores less than 30. This is because of the first-level entry requirements included a $G \geq 30$ restriction. Consider the case of an AFSC with a minimum G requirement of 35, AFSC 811X2, Law Enforcement Helper. The mental qualification rates for this AFS are given in Table 3-7.

TABLE 3-7
MENTAL QUALIFICATION RATES FOR G SCORE \geq 35
AFSC 811X2 - LAW ENFORCEMENT HELPER *
(PERCENT)

SEX	WHITE	BLACK	HISPANIC	TOTAL
Male	97.7	93.8	94.8	96.4
Female	95.3	86.6	91.1	95.2
Total	96.5	90.2	93.3	95.8

Source: Profile of American Youth, 1980.

*Includes only those persons meeting first-level entry requirements as defined within this report.

Notice that white females qualify at higher rates than do black males and males qualify at higher rates than their female counterparts.

To summarize the trends thus far, Table 3-8 gives descending rank orders of each category as well as category totals and total population by composite type.

TABLE 3-8

**RANK ORDER OF MEDIAN MAGE COMPOSITE SCORES
BY ALL CATEGORIES ***

<u>M</u>	<u>A</u>	<u>G</u>	<u>E</u>
White Males	White Females	White Males	White Males
Males	Females	Males	Males
Hispanic Males	Hispanic Females	Whites	Whites
Whites	Whites	Total Population	Hispanic Males
Total Population	Total Population	White Females	Total Population
Hispanics	Black Females	Females	Hispanics
Black Males	White Males	Hispanic Males	White Females
Blacks	Hispanics	Hispanics	Females
White Females	Males	Hispanic Females	Black Males
Females	Hispanic Males	Black Males	Hispanic Females
Hispanic Females	Blacks	Blacks	Blacks
Black Females	Black Males	Black Females	Black Females

Source: Profile of American Youth, 1980.

*Includes only those persons qualified for first-level entry requirements as defined within this report.

Some AFSs have qualification requirements of more than one minimum M, A, G, and E composite score. Presently, there are three types of dual qualification requirements, those requiring both M and E, both M and G and those requiring both A and G minimum scores. One example of each type is given below so that their general affect can be observed. Unfortunately, the multiple score requirements cannot be fixed at 35 as was done for the above mentioned examples.

For a dual requirement of M and G, consider AFSC 631X0, Fuel Specialist. It requires a minimum M score of 35 and a minimum G score of 40. Table 3-9 gives the category qualification rates for this AFS.

TABLE 3-9

**MENTAL QUALIFICATION RATES FOR M SCORE \geq 35 AND G SCORE \geq 40
AFSC - 631X0 - FUEL SPECIALIST *
(PERCENT)**

SEX	WHITE	BLACK	HISPANIC	TOTAL
Male	87.5	49.3	67.3	85.1
Female	42.3	7.7	27.0	40.0
Total	65.8	28.5	50.9	63.6

Source: Profile of American Youth, 1980.

*Includes only those persons meeting first-level entry requirements as defined within this report.

This distribution is driven more by the M requirement than the G requirement. On the whole a G requirement of 40 screens out less than 8% of the total pool while the M requirement screens out almost 34% (see Table 3-4).

Another AFSC with a dual restriction is AFSC 742X0, Open Mess General Manager, which requires an A \geq 65 and a G \geq 45. Table 3-10 gives the appropriate qualification rates.

TABLE 3-10

**MENTAL QUALIFICATION RATES FOR A SCORE \geq 65 AND G SCORE \geq 45
AFSC 742X0 - OPEN MESS GENERAL MANAGER *
(PERCENT)**

SEX	WHITE	BLACK	HISPANIC	TOTAL
Male	39.4	18.8	27.9	60.9
Female	56.5	25.3	40.0	71.2
Total	67.4	39.3	56.1	65.9

Source: Profile of American Youth, 1980.

*Includes only those persons meeting first-level entry requirements as defined within this report.

Taken separately, the $A \geq 50$ requirement screens out 51% of the population, while the $G \geq 45$ requirement screens out only 14%. Recall that the A requirement favors females while the G requirement favors whites. The net affect of the two creates a new hybrid distribution where females score higher than their male counterparts and whites score higher than Hispanics and Hispanics score better than blacks. Yet there exists a strong sex-racial/ethnic interaction.

The last of the dual requirements is the case of a minimum score requirement for both M and E. An AFS which has such a requirement ($M \geq 40$, $E \geq 40$) is AFSC 542X2, Electrical Power Production Specialist. Given the previous results of M and E requirements it is expected that a dual restriction would amplify their effects. Table 3-11 gives the results of this dual restriction.

TABLE 3-11

MENTAL QUALIFICATION RATES FOR M SCORE ≥ 40
AND E SCORE ≥ 40
AFSC 542X2 - ELECTRICAL PRODUCTION SPECIALIST *
(PERCENT)

SEX	WHITE	BLACK	HISPANIC	TOTAL
Male	85.6	46.4	62.5	80.4
Female	30.7	4.7	19.3	29.2
Total	59.2	25.5	44.9	57.1

Source: Profile of American Youth, 1980.

*Includes only those persons meeting first-level entry requirements as defined within this report.

Overall, a sole E requirement screens out 25% of the total pool (mostly female) and a sole M requirement screens out 41% of the total pool (again, mostly female). The joint affect, as expected, yields significantly larger differences across both sex and racial/ethnic categories, with the strongest affect on females since females score lower than their male counterparts in both the Electrical and Mechanical Composites.

Appendix A presents the mental qualification rates for each sex-racial/ethnic category for each AFS.

The general effects of M, A, G, and E requirements are summarized below:

- Males tend to score higher on the Mechanical, Electronic and General composites;
- Females outscore males on the Administrative composite;
- Whites tend to score higher than Hispanics, and Hispanics tend to score higher than blacks on all composites;
- In some cases, score differences across sex are more substantial than score differences across racial/ethnic groupings as demonstrated with white females scoring higher than black males on the General composite and nearly equivalently on the Electronic composite;
- Score distributions of men and women are most similar on the General and Administrative composites and least similar on the Mechanical and Electronic composites;

- Imposition of dual restrictions (i.e., both M and E) amplify the aforementioned affects.

The major consideration is that qualification rates vary across sex/racial/ethnic categories with respect to Air Force standards. Thus, it becomes necessary to account for these differences in any attempt to simulate accurately AFS-specific qualification. AFS-specific qualification rates were derived by evaluating each of the first-level qualified pool individuals with respect to each AFS's minimum MAGE score as given by Air Force Regulation 39-1.¹ Individual qualification rates are summed into category qualification rates by sex and racial/ethnic distinctions. Before a simulation of the job-person selection process can be conducted, consideration must be directed towards physical qualification.

3.3 PHYSICAL QUALIFICATIONS

Aside from meeting mental qualification standards, candidates for enlistment must also meet specific Air Force physical requirements. These physical requirements are composed of two levels of qualification -- a minimum entry level and an AFS-specific level.

The Air Force uses a seven-factor, four-point health profile evaluation system, called PULHESX, to assess an individual's physical condition. The seven factors are given here as: physical condition (P), upper extremities (U),

¹

Air Force Regulation 39-1(C6); Enlisted Personnel, Airman Classification, Attachment 55.

lower extremities (L), hearing-ears (H), eyes-vision (E), neuropsychiatric (S), and physical work capacity (X). On a scale of 1 to 4 with "1" being the highest score, candidates must score at least a "3" on each of the seven profile factors.¹ In addition to being found minimally physically qualified, enlistment candidates are required to meet AFS-specific physical requirements before being considered as physically qualified for an AFS.

No nationally representative sample of American youth exists which contains measures of physical characteristics equivalent to the Air Force's specific physical standards; however, physical data are available based upon medical examination of enlistment applicants. Used by themselves, these data would prove inappropriate since most young persons who are aware that they have a significant medical/physical impairment are unlikely to apply for enlistment. Furthermore, others are screened out, or discouraged, by the military recruiters based on simple checklists of manifestly disqualifying conditions.

In response to these constraints, we have adopted a methodology which combines historical estimates of minimal physical qualification rates, regardless of AFSC, with current data for AFSC physical qualification rates of those found to be minimally qualified. The moral/administrative disqualification rates used in this model are 4.8% for men and 1.6% for women, as provided by Volume II of this study.

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IBID.

Under Air Force physical standards, 73.1% of the men and 64.3% of the women were found to be minimally physically qualified.¹ The percentages of minimally physically qualified male and female enlistment candidates who received higher classifications, either "1" or "2", were determined by using data on actual enlistment candidates in FY 84. Based upon these data, it was evident that all but a small proportion of otherwise qualified applicants could meet the most vigorous physical profile requirements under most of the PULHESX factors. The greatest exception was with respect to the X-factor requirements. 32% of the female examinees met the "2" profile requirement for this factor, which requires a weight lift of 70 pounds to six feet, and only about 3.5% could meet the "1" requirement of a weight lift of 100 pounds to six feet. By contrast, over 98 percent of the male examinees were classified as "2" and over 80% were classified as "1".

Appendix Table A-6 contains the combined physical/moral/administrative qualification rates by AFS for both males and females. The results show that while females, for the most part, should be considered only slightly less competitive with men in terms of physical qualification without considering lifting requirements, males qualify at a significantly higher rate than females when X-factor requirements are considered. Furthermore, since X-factor requirements above "3" are required in AFSCs in which females, on the average, are at a competitive disadvantage with respect to the aptitude area mental scores (i.e., Mechanical, General and Electronic), the combination results in a substantial restriction to females in such AFSCs.

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Volume II of this study details the methodology used for deriving these qualification rates.

In the absence of a nationally representative physical health data base, a methodology was developed to provide estimates of physical qualification rates, by sex, for each AFS. While the true, but unknown, qualification rates may be different than those derived, there exists no reason to suspect differential biases between male and female estimated qualification rates. In other words, inadvertent over- or under-estimation is equally likely to affect either males or females, leaving their relative relationship unbiased.¹

1.4 INTENTIONS TO SERVE

It should be apparent that in the environment of an all-voluntary military, being qualified is not necessarily enough to be considered as a potential enlistee, since qualified individuals might not have any intention of volunteering for military service, enlisted or otherwise. In order to make realistic projections of enlistment supply, it becomes necessary to determine the number of individuals both qualified and willing to enlist.

Based upon the 1982 Youth Attitude Tracking Survey (YATS), males were reported as being between 2 to 3 times more predisposed towards military service than females.² In the case of young men, the sub-group indicating a positive predisposition towards military service in contrast to that indicating a negative predisposition, is described as:

- Less likely to be currently married;

Recommendations for future research in this area are made in Volume II, Section 6.

Youth Attitude Tracking Study, Fall 1982, The Public Sector Research Group of Market Facts, Inc., Spring 1985.

- Less likely to be employed full-time;
- More likely to be unemployed and looking for a job;
- Having less formal education;
- Younger;
- More likely to be black or Hispanic;
- More likely to have a vocational curriculum in high school and less likely to have a college preparatory curriculum;
- More likely to be planning to attend vocational school;
- More likely to perceive greater difficulty in finding a full-time job.

In the case of females, the sub-group indicating a positive predisposition is more likely to be:

- Unemployed and looking for a job;
- Perceiving more difficulty in finding a job;
- In a lower year in school;

has actually occurred in the past. The Syllogistics model lends itself well to determining expected male and female representation in the annual Air Force accessions, given annual AFS accession requirements.

The model was designed to simulate a completely randomized, unconstrained, non-discriminant AFS qualification-assignment process. Furthermore, since differential probabilities of enlistment have been taken into account by scaling category qualification rates by measures of positive propensity, the results will therefore represent an optimal solution. Deviations from the optimal solution necessarily require increased resources (time, dollars, manpower, etc.).

Expected male/female distributions were simulated under two different scenarios -- one scenario assumed that females were as willing to enlist as their male counterparts while the other assumed that self-reported willingness, as reported by the Youth Attitude Survey, was the most appropriate measure of willingness to enlist.

The equal male/female willingness scenario produced a simulated distribution of 71.14% male and 28.86% female. The more realistic, variant male/female willingness measures yielded a distribution of 84.81% male and 15.18% female. This is, coincidentally, almost the same male to female distribution found in the Air Force enlisted-comparable civilian occupations derived earlier. This result would tend to reinforce the notion that simulated female entry into the Air Force reflects the same entry pattern as found in the civilian sector.

than black males on the M, E, G composites;

- Females outscore males on the Administrative composite;
- Males have a higher moral/administrative disqualification rate, about 3 to 1 of that for females;
- A higher percent of males (73.1%) are able to pass the minimum medical requirements as compared to females (64.3%);
- AFS-specific physical requirements disqualify more females than males;
- X factor requirements significantly restrict female qualification;
- Males, at present, are two to three times as willing to enlist as their female cohorts;
- Blacks are more willing to enlist than Hispanics;
- Hispanics are more willing to enlist than whites.

In order to examine the net effect of all these factors taken simultaneously a model was developed to simulate the entire AFS qualification/classification process in an unrestricted state. The model does not pretend to be an exact representation of the entire recruiting process since it is, to a large degree, behaviorally affected. An exact model of the recruiting environment/process would yield accession results no different than that which

SECTION 5

CONCLUSION

An enlistment model was developed which mathematically reconciles Air Force requirements with enlistment-age population attributes. It simulates a nationally representative Air Force Specialty assignment process for 18-23 year olds. Furthermore, the model considers all facets of AFS qualification -- educational, mental, physical, and moral enlistment factors. Results were derived by incorporating the best available data into the model's specifications. In general, the results indicate a higher net qualification/willingness-to-enlist rate for males than for females. The results of all factors can be summarized as follows:

- A higher percentage of males meet Air Force basic mental/education requirements;
- Whites demonstrate a significantly higher basic entry qualification rate;
- Males tend to score higher on the Mechanical, Electronic and General composites;
- Whites tend to score higher than Hispanics, Hispanics tend to score higher than blacks on all composites;
- In some cases, score differences across sex are more substantial than those across racial/ethnic groupings with white females scoring higher

fact that, while black males have relatively higher physical qualification rates and tend to be substantially more willing to enlist than white females, white females, as a group, have aptitude scores competitive with those of black males and a much higher prevalence in the total population.

As was mentioned above, these results are based upon anticipated FY 1985 accession requirements. Since the distributions are weighted by each AFS's percent of total accessions, accession composition will vary with changes in accession requirements.

The model's initial results were generated under the assumption that racial/ethnic-sex category positive predispositions toward serving in the military were as follows: WM (.13), WF (.05), BM (.27), BF (.15), HM (.25), and HF (.17). An alternative scenario is represented in Table 4-2 which displays the model's output under the assumption that females are equally as willing to enlist as their male counterparts. WM (.13), NF (.13), BM (.27), BF (.27), HM (.25), and HF (.25).

TABLE 4-2

**SIMULATED ACCESSION COMPOSITION BY APTITUDE AREA
EQUAL MALE/FEMALE WILLINGNESS TO ENLIST
(PERCENT OF TOTAL APTITUDE AREA)**

Aptitude Area	White		Black		Hispanic		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
M	75.62	14.63	4.28	.30	4.63	.54	84.53	15.47
A	43.18	44.45	3.19	3.80	3.03	2.35	49.40	50.60
G	57.42	29.89	4.71	2.45	4.04	1.49	66.17	33.83
E	68.32	21.12	3.69	.89	4.23	.75	76.24	23.76
TOTAL	62.80	25.94	4.22	1.73	4.12	1.20	71.14	28.86

Total female representation under this assumption is almost twice that found in the initial model -- 28.86% compared to 15.18%. The increase, however, comes at the expense of lower male and aggregate representation. Inclusion of white females tends to "crowd out" black males. This is attributable to the

SECTION 4

THE RESULTS

The best available data were used to estimate equations 6), 7), 8), and 9). The results of this estimation are presented and discussed within this section. Alternative model scenarios are also presented.

The estimated values of Q_{kj} , QMA_{kj} and the within-AFS distributions are presented in the Appendix. The combined Air Force distributions are presented below in Table 4-1.

TABLE 4-1

**SIMULATED ACCESSION COMPOSITION BY APTITUDE AREA
(PERCENT OF TOTAL APTITUDE AREA)**

Aptitude Area	White		Black		Hispanic		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
M	83.18	6.39	4.72	0.19	5.09	.42	92.99	7.01
A	61.48	24.42	4.53	3.00	4.30	2.27	70.31	29.69
G	71.11	14.98	5.82	1.77	5.00	1.32	81.93	18.07
E	79.34	10.30	4.23	.59	4.90	.62	88.47	11.53
TOTAL AF	74.83	12.86	5.07	1.26	4.92	1.06	84.81	15.18

The model estimates a total Air Force accession distribution of 84.81% male and 15.18% female based on anticipated FY 1985 accessions. By partitioning AFSs into their respective aptitude areas as was done previously, the within-area distributions are significantly different from the total Air Force distribution. Mechanical and Electronic AFSs are predominantly male -- 92.99% and 88.47%, respectively. Women, as expected, are represented heaviest in Administrative (29.69%) and General (18.07%) aptitude are AFSs.

As a starting point for the estimation of the model, current YATS composite propensities were used as given in Table 3-15.

TABLE 3-15
SELF REPORTED POSITIVE PROPENSITY TO ENLIST

<u>SEX</u>	<u>RACIAL/ETHNIC CATEGORY</u>		
	<u>WHITE</u>	<u>BLACK</u>	<u>HISPANIC</u>
Male	.13	.27	.25
Female	.05	.15	.17

Source: Unpublished data of Youth Attitude Tracking Study Results.

It is our belief that these are the best available measures of military interest. Furthermore, they are updated yearly to capture changing male and female interests. These estimates are varied in the subsequent section to examine the model's sensitivity to changes in propensity.

TABLE 3-14
(Continued)

SELECTED OCCUPATION*	1971-1973	1974-1976	1977-1979	1980-1982
Transport Equip Ops.	3.03	4.67	6.66	7.48
Protective Services	3.97	6.37	11.01	12.28
Total Selected Occupations	12.00	12.95	14.83	16.54
Total Labor Force	41.30	43.42	45.51	46.08

***Only the Air Force equivalent detailed occupational categories are considered, their general classification is given here for brevity.**

While many Air Force job assignments are in male-dominated occupational areas, apparent female interest in these areas has been increasing. Overall female interest in enlistment, however, is not equal to that of males, generally. Attitudinal surveys and interest inventories have shown that males, by and large, are significantly more interested in the kind of work the military has to offer and are more inclined to consider enlisting than females.¹ This is not to say that these differences are expected to remain unchanged. On the contrary, the evidence would tend to suggest that, while the conventional notion that military service is a traditionally male occupation still exists, the degree to which this notion affects female preference for military service is abating as demonstrated by recent growth in female enlistment rates. Moreover, as females continue to enter the labor market in larger numbers, a fundamentally non-traditional phenomenon, female preference for military service is likely to increase as the labor market grows increasingly competitive as a result of their entry. As a final note, an acceleration effect is likely to occur if female participation in the military comes to be more socially acceptable.

¹

Youth Attitude Tracking Study, Fall 1982, The Public Sector Research Group of Market Facts, Inc., Spring 1983.

TABLE 3-13
(Continued)

CENSUS OCCUPATION CODE		AIR FORCE MAJOR GROUP
703	Bus Drivers	60
961	Protective Service Firefighters	57
964	Police and Detectives	81
962	Guards	60

Table 3-14 presents the distribution of women, ages 16-29, in occupations comparable to those in the military. It is clear that the degree of female penetration into these enlistee-comparable occupations has increased over the time period 1971-1982. The percent female of all selected occupations taken collectively has risen from 12% in 1971-1973 to 16.54% in 1980-1982.

TABLE 3-14
DISTRIBUTION OF WOMEN IN SELECTED OCCUPATIONS
AGES 16-29 FROM 1971-1982

SELECTED OCCUPATION*	PERCENT FEMALE			
	1971-1973	1974-1976	1977-1979	1980-1982
Computer Specialist	20.74	22.60	33.49	32.12
Math Specialist	39.45	37.58	43.23	51.27
Operations Research	10.72	24.82	31.88	43.23
Engineer & Science Techs	11.84	14.58	20.21	22.47
Air Traffic Controllers	17.51	19.18	21.88	41.98
Radio Operators	22.55	50.86	60.77	53.70
Clerical Workers	77.42	79.83	81.93	81.03
Craft and Kindred	3.52	5.18	5.96	6.65
Operatives and Laborers	19.91	21.33	22.84	22.70

TABLE 3-13
(Continued)

CENSUS OCCUPATION CODE		AIR FORCE MAJOR GROUP
415,416,410-412 421,430,431,436 440,510-512 520-523,534,550 560	Craft and Kindred Workers Construction Crafts	55; 54; 36; 54 43; 55
433	Power Line and Cable	36; 54
470-495 470 471 472 473 475 481 482 484 485	Mechanics and Repair Air cond. etc. Aircraft Auto Body Repair Auto Mechanics Data Machine Repair Heavy Equipment Household Appliance Office Mach. Repair Radio and TV Repair	47; 59 54 42; 43; 54 47 47 54; 59 47 54 42 30
552	Telephone Installers	29
554	Tele. Line and Cable	36
461	Machinists	42
535	Sheet Metal Workers	
650-653	Precision Machine Ops.	42
452	Inspectors, nec	31; 42; 44
545	Stationary Engineers	54
436	Excavating Equipment	55
424	Crane, Derrick, etc.	60
680	Operatives and Laborers Welders and Cutters	42
602	Assemblers	42
753	Material Handlers	42
715	Transport Equipment Ops. Truck Drivers	60

Through use of a crosscode system developed for the Department of Defense, it was possible to select census occupational groups that are roughly equivalent to the specialties in the foregoing groups at the journeyman level.¹ Table 3-13 presents the Census Occupational Codes for specialties in selected Air Force two-digit career fields.

TABLE 3-13

CENSUS OCCUPATIONAL CODES FOR SPECIALTIES IN AIR FORCE MAJOR GROUPS

<u>CENSUS OCCUPATION CODE</u>		<u>AIR FORCE MAJOR GROUP</u>
003-005	Computer Specialists	51
003	Programmers	51
004	Systems Analysts	51
034-036	Mathematical Specialists	51
055	Operations Researchers	51
150-162	Engineering and Science Techs	55
152	Drafters	55
153	Elec., electronic tech	55
161	Surveyors	55
164	Air Traffic Controllers ²	29
171	Radio Operators	29
	Clerical Workers	
315	Dispatchers	47; 60
323	Expeditors	55; 60
343	Computer Operators	29; 51
374	Shipping, etc. clerks	60
390	Ticket, etc. agents	60
345	Keypunch operators	29; 51

¹

The crosscode project was conducted by Booz-Allen & Hamilton, Inc. in 1983 and completed in 1985.

²

Since only journeyman-level civilian Air Traffic Controllers were considered, Air Force Major Group 29 was considered more representative than Major Group 27 which represents higher skill levels.

personal services; while females gave low rank to engineering and physical science, crafts, numerical, machine operations, and quality control. These preferences reflect more or less historical "traditional" preference structures of each sex.

A comparison of 1972 and 1980 high school seniors, as conducted by the National Center for Education Statistics, reports that female preference for 'male-dominant' jobs more than doubled over the 8 year period while male interest in the same jobs increased by only about 30%.

In order to translate interest into actuality, we focused on examining changes in the actual occupational distributions of males and females between 1971 and 1982. Over the 1971-1982 time period, the percentage of total labor force represented by women has increased from 41% to 46%. For our purposes, however, we are more interested in changes in their representation in occupations that are comparable to jobs with similar attributes in the military and in the younger end of the labor force. In order to assess such changes, we focused on the following selected Air Force two-digit career fields presented in Table 3-12. Taken together they are considered to be loosely representative of the types of traditionally male career fields for enlisted personnel.

TABLE 3-12
SELECTED AIR FORCE TWO-DIGIT CAREER FIELDS

29	Communications Operations	44	Missile Maintenance
30	Communications -- Electronic Systems	46	Munitions & Weapons Maint.
31	Missile Electronic Maintenance	47	Vehicle Maintenance
32	Avionic Systems	51	Computer Systems
34	Training Devices	54	Mechanical Electrical
36	Wire Communications Systems	55	Structural/Pavements
39	Maintenance Management Systems	56	Sanitation
40	Intricate Equipment Maintenance	57	Fire Protection
42	Aircraft Systems Maintenance	60	Transportation
43	Aircraft Maintenance	81	Security Police

down by racial/ethnic categories with respect to this area, it is reasonable to expect differences across racial/ethnic categories considering the significantly different employment outlook facing each of the categories.

As a means of better understanding youth's work-related evaluation process, the YATS sample population was asked to rate the importance of a number of job attributes as well as the sample respondents' perceived achievability of attributes in military versus civilian jobs. A comparison of the results for males and females showed that the two groups do not value nor perceive achievability of all job attributes in the same way. Females were found to place a significantly higher degree of importance on equal opportunity and pay. Also, compared to the male sample, females tended to view money for education as a more important job attribute. For other job attributes, little difference existed between male and female responses.

The results, however, do not explain the large difference between male and female reported positive predisposition towards military service. Since many of the positions offered by the military involve traditionally male jobs, it is important to measure female interest in performing these jobs. A young woman's interest in enlistment is partly dependent upon her interest in these jobs.

The results of the Ohio Vocational Interest Survey (OVISIT) demonstrate a high degree of correlation between male and female rank ordering of occupational interest (.8).¹ However, males tended to rank the following kinds of work low: health services, clerical, customer services, basic services, and skilled

1

The Psychological Corporation, A Manual for Interpreting the Ohio Vocational Interest Survey, 1983.

- Taking a vocational curriculum in high school;
- Black;
- Planning to attend college or vocational school.

Several areas were explored in order to better understand the factors which lead to differences in predisposition toward the military. The areas explored include:

- Differences in perceived difficulty of finding a job;
- Importance and availability of desired job characteristics;
- Work preferences;
- Male-female occupational distributions in occupations similar to those in the military;
- and differences in occupational interests in general.

Labor market factors appear to have some relationship to recruiting success. Higher unemployment rates tend to correspond with greater recruiting success and vice versa.¹ The YATS survey, however, reported that there did not exist any significant differences between male and female perceptions of difficulty in finding a job. Although the published YATS results are not broken

¹

See Volume III of this study.

The Air Force operates, on a daily basis, a pre-enlistment person-job match (PJM) system. The AFS assignment process, after job properties and people characteristics have been defined, involves matching people with jobs in some optimal fashion. The PJM system, however, is only used on actual enlistment candidates, not nationally representative youth cohorts and, therefore, represents only actual recruiting market outcomes rather than desired, attainable, or expected outcomes.

The model developed as part of this study, on the other hand, is based upon sufficing conditions rather than upon optimization criteria. Both methods taken together would substantially enhance Air Force ability to develop a comprehensive methodology for determining male and female accessions.

A person-job match simulation could be conducted by adapting the current PJM system for use on the representative data base developed under this study. Supplemental job preference could be proxied by examining historical AFS preferences as recorded by both pre- and post-enlistees. The results of such a simulation could also be used as a basis for evaluating the efficiency of the current JPM system.

The model could also be subsequently modified to examine male/female distributions in the entire enlisted force by incorporating a retention/advancement component.

Another area in which future enhancements are recommended relates to the estimation of willingness to enlist, or propensity. An individual's propensity to enlist in the military is a key variable in the determination and actualization of the supply of youth being both qualified and, to some degree,

willing to enlist. Propensity is the most dynamic variable in such attempts to ascertain and/or forecast supply. Changes in propensity however, should not be considered as random events. Indeed, an individual's formulation of his or her "composite" propensity is dependent upon a range of factors, most of which evolve around the individual's perception of military service, economic opportunity outlook, and preference for the type of work offered by the military.

Causal models of propensity could be developed that examine the relationship between propensity and demographic/environmental factors. The results from such a model could be used to better ascertain expected future supply of qualified and willing-to-enlist individuals.

Substantial work has already been conducted with respect to propensity "at-large". At the very least, a review of these efforts as well as available data sources needs to be conducted so that the feasibility of estimating a functional propensity model can be ascertained.

As part of this study, we examined the possibility of applying the model's methodology to officer accessions. It has become clear, however, that the officer accession process is substantially different than that for enlisted personnel. The most notable differences include the following:

- Officer candidates have four separate and characteristically unique accession avenues as opposed to one for enlisted. These are:

- The Air Force Academy;
 - The Air Force Reserve Officer Training Corps (AFROTC);
 - Officer Training School (OTS);
 - Direct appointment programs.
-
- Quotas on the number of officer seats are pre-assigned to individual ROTC units.
 - Self-selection biases.
 - Selection criteria contain many non-measurable characteristics that cannot be estimated by available nationally representative samples.
 - Ultimate selection is determined by the selection of the highest rated individuals from a cohort (i.e., AFROTC unit) and the number chosen cannot exceed the pre-assigned quotas as opposed to all who meet minimum criteria for enlistment.
 - Minimal standards do not, typically, affect the selection process since selection is drawn from the upper-end of the quality pool.

In light of these circumstances we do not consider the enlistment model developed herein to be applicable to Air Force officer accessions.

APPENDIX A

DATA TABLES

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TABLE A-1

COMBINED QUALIFICATION RATES BY CATEGORY BY AFSC (Q_{kj})

This table displays combined mental, medical and moral qualification rates of those 18-23 year old individuals minimally qualified for the Air Force (noninstitutionalized, less than two years college completed). Equation 6) derives this rate and is reprinted here as:

$$6) \quad Q_{kj} = FLQR_k * MED_{kj} * QMAGE_{kj} * MORAD_{kj}.$$

For example, 25.07% of the white males are qualified for AFSC 100X0. AFSC 100X0 is an A-aptitude area AFS as noted by the column TYPE.

Combined Qualification Rates (Q) by Category, by AFSC

AFSC	TYPE	WM	WF	BM	BF	HM	HF
100X0	A	25.07%	28.18%	4.46%	6.46%	11.45%	10.15%
111X0	G	32.44%	9.18%	7.49%	2.00%	15.40%	3.09%
112X0	G	30.57%	8.61%	6.10%	1.68%	14.02%	2.74%
113X0	E	35.26%	9.80%	9.14%	2.37%	17.81%	3.31%
114X0	M	32.86%	4.69%	5.54%	0.26%	13.94%	1.13%
115X0	G	24.92%	6.66%	5.75%	1.45%	11.83%	2.24%
116X0	G	33.86%	26.97%	7.81%	5.87%	16.07%	9.08%
121X0	G	26.81%	1.63%	6.19%	0.36%	12.73%	0.55%
122X0	G	36.84%	10.93%	10.05%	3.04%	19.42%	4.25%
201X0	G	34.55%	28.87%	7.98%	6.29%	16.40%	9.72%
201X1	G	20.28%	13.90%	2.22%	1.30%	6.11%	3.02%
202X0	G	26.12%	19.99%	3.69%	2.50%	9.61%	5.54%
203X0	G	19.72%	13.68%	2.16%	1.28%	5.94%	2.97%
205X0	G	19.74%	13.41%	2.16%	1.26%	5.95%	2.91%
206X0	G	23.57%	17.25%	3.18%	1.99%	8.34%	4.66%
207X1	A	24.32%	27.64%	4.33%	6.34%	11.11%	9.95%
207X2	A	24.32%	27.64%	4.33%	6.34%	11.11%	9.95%
208X0	G	19.72%	13.67%	2.16%	1.28%	5.94%	2.97%
208X1	G	19.72%	13.67%	2.16%	1.28%	5.94%	2.97%
208X2	G	19.72%	13.67%	2.16%	1.28%	5.94%	2.97%
208X3	G	19.72%	13.67%	2.16%	1.28%	5.94%	2.97%
208X4	G	19.72%	13.67%	2.16%	1.28%	5.94%	2.97%
208X5	G	19.72%	13.67%	2.16%	1.28%	5.94%	2.97%
209X0	G	26.12%	19.99%	3.69%	2.50%	9.61%	5.54%
222X0	G	34.11%	9.79%	7.87%	2.13%	16.19%	3.30%
231X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
231X1	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
231X2	G	26.80%	20.65%	6.19%	4.50%	12.72%	6.95%
232X0	G	25.55%	19.78%	3.61%	2.47%	9.40%	5.48%
233X0	G	34.55%	28.87%	7.98%	6.29%	16.40%	9.72%
233X1	G	34.55%	28.87%	7.98%	6.29%	16.40%	9.72%
241X0	G	29.86%	24.31%	5.44%	4.31%	12.68%	6.91%
242X0	G	25.61%	19.00%	3.62%	2.37%	9.42%	5.26%
251X0	G	25.49%	18.95%	3.60%	2.37%	9.38%	5.25%
271X1	A	28.02%	30.14%	5.43%	7.45%	13.33%	11.21%
271X2	A	28.02%	30.14%	5.43%	7.45%	13.33%	11.21%
272X0	G	33.86%	26.97%	7.81%	5.87%	16.07%	9.08%
273X0	G	33.86%	26.97%	7.81%	5.87%	16.07%	9.08%
274X0	G	31.90%	25.31%	6.36%	4.94%	14.63%	8.04%
275X0	G	30.28%	9.01%	6.04%	1.76%	13.88%	2.87%
276X0	G	24.06%	18.08%	4.80%	3.53%	11.03%	5.75%
277X0	E	29.83%	18.00%	4.39%	2.62%	12.39%	4.98%
291X0	G	33.63%	28.41%	7.76%	6.19%	15.97%	9.56%
293X3	A	24.51%	26.25%	4.36%	6.02%	11.20%	9.45%
295X0	G	33.63%	28.41%	7.76%	6.19%	15.97%	9.56%
296X0	G	26.25%	20.10%	3.71%	2.51%	9.66%	5.57%
297X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
302X0	E	27.10%	14.96%	3.59%	1.64%	11.55%	3.38%
302X1	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
303X1	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
303X2	E	16.88%	7.82%	1.33%	0.48%	6.53%	1.52%
303X3	E	21.26%	9.90%	2.28%	0.59%	8.15%	1.93%
304X0	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
304X1	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%

Based Upon Model Results.

Combined Qualification Rates (Q) by Category, by AFSC

AFSC	TYPE	WM	WF	BM	BF	HM	HF
304X4	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
304X5	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
304X6	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
305X4	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
306X0	E	24.40%	12.47%	2.83%	1.17%	10.08%	2.62%
306X1	E	27.03%	14.92%	3.58%	1.64%	11.52%	3.37%
306X2	E	24.40%	12.47%	2.83%	1.17%	10.08%	2.62%
307X0	E	24.40%	12.47%	2.83%	1.17%	10.08%	2.62%
309X0	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
316X0	E	18.04%	8.33%	2.09%	0.78%	7.45%	1.75%
316X1	E	19.50%	0.73%	2.26%	0.07%	8.05%	0.15%
316X2	E	23.39%	4.15%	2.71%	0.39%	9.66%	0.87%
316X3	E	24.40%	12.47%	2.83%	1.17%	10.08%	2.62%
321X0	E	23.39%	4.15%	2.71%	0.39%	9.66%	0.87%
321X1	E	23.39%	4.15%	2.71%	0.39%	9.66%	0.87%
321X2	E	23.81%	12.31%	2.76%	1.15%	9.83%	2.59%
322X2	E	20.70%	9.74%	2.22%	0.58%	7.93%	1.90%
323X1	E	23.39%	4.15%	2.71%	0.39%	9.66%	0.87%
323X2	E	23.75%	12.27%	2.75%	1.15%	9.81%	2.58%
323X3	E	23.39%	4.15%	2.71%	0.39%	9.66%	0.87%
324X0	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
325X0	E	23.43%	11.74%	2.72%	1.10%	9.67%	2.47%
325X1	E	23.43%	11.74%	2.72%	1.10%	9.67%	2.47%
326X0	E	16.88%	7.46%	1.33%	0.46%	6.53%	1.45%
326X3	E	23.81%	11.74%	2.76%	1.10%	9.83%	2.47%
326X4	E	23.81%	11.74%	2.76%	1.10%	9.83%	2.47%
326X5	E	23.81%	11.74%	2.76%	1.10%	9.83%	2.47%
326X6	E	23.45%	4.16%	2.72%	0.39%	9.68%	0.88%
326X7	E	23.45%	4.16%	2.72%	0.39%	9.68%	0.88%
326X8	E	25.97%	4.98%	3.44%	0.55%	11.07%	1.12%
328X0	E	23.81%	12.31%	2.76%	1.15%	9.83%	2.59%
328X1	E	23.81%	12.31%	2.76%	1.15%	9.83%	2.59%
328X2	E	23.81%	12.31%	2.76%	1.15%	9.83%	2.59%
328X3	E	19.55%	0.73%	2.27%	0.07%	8.07%	0.15%
328X4	E	23.45%	4.16%	2.72%	0.39%	9.68%	0.88%
328X5	E	23.91%	11.65%	2.77%	1.09%	9.87%	2.45%
341X1	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
341X2	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
341X4	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
341X6	E	24.46%	12.51%	2.84%	1.17%	10.10%	2.63%
341X7	E	24.40%	12.47%	2.83%	1.17%	10.08%	2.62%
361X0	M	27.15%	0.83%	4.57%	0.05%	11.52%	0.20%
361X1	M	34.18%	4.96%	5.76%	0.27%	14.50%	1.20%
362X1	E	34.99%	24.18%	7.64%	4.95%	15.60%	8.07%
362X3	E	34.91%	24.08%	7.62%	4.94%	15.56%	8.05%
362X4	E	33.28%	7.70%	7.27%	1.58%	14.84%	2.57%
391X0	G	32.64%	27.17%	6.51%	5.31%	14.97%	8.64%
392X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
404X0	E	36.67%	28.42%	9.21%	6.26%	17.24%	9.69%
404X1	E	34.99%	24.16%	7.64%	4.95%	15.60%	8.07%
423X0	E	34.31%	8.81%	8.19%	1.84%	15.86%	2.96%
423X1	M	34.72%	6.50%	6.61%	0.43%	15.80%	1.93%
423X2	E	30.09%	1.80%	7.80%	0.44%	15.20%	0.61%
423X3	M	33.63%	4.93%	5.67%	0.27%	14.26%	1.19%

Based Upon Model Results.

A-3

Combined Qualification Rates (Q) by Category, by AFSC

AFSC	TYPE	WM	WF	BM	BF	HM	HF
423X4	E	35.14%	9.46%	8.83%	2.08%	16.52%	3.23%
423X5	M	33.26%	4.84%	5.67%	0.27%	13.46%	1.19%
426X1	M	33.02%	10.52%	4.97%	0.44%	13.69%	3.52%
426X2	M	34.72%	6.50%	6.61%	0.43%	15.80%	1.93%
426X3	M	34.15%	14.57%	5.75%	0.80%	14.49%	3.52%
426X4	M	34.72%	6.50%	6.61%	0.43%	15.80%	1.93%
427X0	M	34.15%	14.57%	5.75%	0.80%	14.49%	3.52%
427X1	M	34.15%	14.57%	5.75%	0.80%	14.49%	3.52%
427X2	G	33.71%	28.50%	7.78%	6.21%	16.01%	9.59%
427X3	M	35.26%	19.22%	6.71%	1.27%	16.05%	5.72%
427X4	M	34.15%	14.57%	5.75%	0.80%	14.49%	3.52%
427X5	M	34.15%	14.57%	5.75%	0.80%	14.49%	3.52%
431X0	M	27.11%	0.62%	4.08%	0.03%	11.24%	0.21%
431X1	M	33.63%	4.93%	5.67%	0.27%	14.26%	1.19%
431X2	M	33.63%	4.93%	5.67%	0.27%	14.26%	1.19%
431X3	M	33.63%	4.93%	5.67%	0.27%	14.26%	1.19%
431X4	M	33.63%	4.93%	5.67%	0.27%	14.26%	1.19%
443X0	M	21.35%	0.70%	3.60%	0.04%	9.06%	0.17%
445X0	E	27.75%	20.57%	7.20%	4.99%	14.02%	6.94%
445X1	M	25.25%	3.39%	4.25%	0.19%	10.71%	0.82%
461X0	M	31.51%	8.05%	3.88%	0.37%	12.07%	1.79%
462X0	M	31.02%	2.72%	3.82%	0.13%	11.88%	0.60%
463X0	M	31.51%	8.05%	3.88%	0.37%	12.07%	1.79%
464X0	M	30.08%	7.82%	3.21%	0.37%	10.77%	1.67%
472X0	M	34.15%	14.57%	5.75%	0.80%	14.49%	3.52%
472X1	M	35.26%	19.22%	6.71%	1.27%	16.05%	5.72%
472X2	M	34.15%	14.57%	5.75%	0.80%	14.49%	3.52%
472X3	M	33.02%	10.52%	4.97%	0.44%	13.69%	3.52%
472X4	A	24.40%	27.73%	4.34%	6.36%	11.15%	9.98%
511X0	G	36.25%	31.26%	8.79%	7.72%	17.83%	11.26%
511X1	G	30.09%	24.47%	5.48%	4.34%	12.77%	6.95%
542X0	E	37.54%	30.83%	9.74%	7.47%	18.96%	10.40%
542X1	E	29.86%	1.76%	7.74%	0.43%	15.08%	0.59%
542X2	M	31.36%	3.47%	4.64%	0.15%	12.07%	0.85%
545X0	E	30.06%	1.76%	7.80%	0.43%	15.18%	0.59%
545X1	M	34.15%	14.57%	5.75%	0.80%	14.49%	3.52%
545X2	E	30.06%	1.76%	7.80%	0.43%	15.18%	0.59%
545X3	E	37.54%	30.83%	9.74%	7.47%	18.96%	10.40%
551X0	M	35.23%	19.19%	6.71%	1.27%	16.03%	5.71%
551X1	M	35.23%	19.19%	6.71%	1.27%	16.03%	5.71%
552X0	M	33.59%	4.92%	5.66%	0.27%	14.25%	1.19%
552X1	M	34.69%	6.49%	6.60%	0.43%	15.79%	1.93%
552X2	M	35.23%	19.19%	6.71%	1.27%	16.03%	5.71%
552X4	M	36.13%	19.48%	6.88%	1.29%	16.44%	5.80%
552X5	M	34.99%	14.76%	5.90%	0.81%	14.84%	3.57%
553X0	G	32.55%	27.10%	6.49%	5.29%	14.92%	8.61%
554X0	A	25.00%	28.11%	4.45%	6.45%	11.42%	10.12%
555X0	G	34.54%	28.88%	7.97%	6.29%	16.40%	9.72%
566X0	G	36.15%	31.18%	8.77%	7.70%	17.78%	11.23%
566X1	M	35.58%	6.59%	6.77%	0.44%	16.19%	1.96%
571X0	G	28.76%	1.78%	6.98%	0.44%	14.14%	0.64%
591X0	M	35.26%	19.22%	6.71%	1.27%	16.05%	5.72%
591X1	M	35.26%	19.22%	6.71%	1.27%	16.05%	5.72%
602X0	A	28.02%	30.14%	5.43%	7.45%	13.33%	11.21%

Based Upon Model Results.

Combined Qualification Rates (Q) by Category, by AFSC

AFSC	TYPE	WM	WF	BM	BF	HM	HF
602X1	A	28.02%	30.14%	5.43%	7.45%	13.33%	11.21%
602X2	G	37.25%	33.52%	10.16%	9.31%	19.64%	13.03%
603X0	M	35.23%	19.19%	6.71%	1.27%	16.03%	5.71%
605X0	A	31.49%	31.86%	7.64%	8.36%	15.98%	12.45%
605X1	G	37.22%	33.47%	10.15%	9.30%	19.62%	13.02%
611X0	A	34.62%	33.43%	9.15%	9.08%	18.63%	13.06%
612X0	G	37.69%	11.51%	10.28%	3.20%	19.87%	4.48%
612X1	A	34.62%	33.43%	9.15%	9.08%	18.63%	13.06%
622X0	G	38.28%	34.06%	10.44%	9.46%	20.18%	13.25%
631X0	G	31.08%	4.85%	4.78%	0.25%	12.60%	1.20%
645X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
645X1	G	38.17%	33.98%	10.41%	9.44%	20.13%	13.21%
645X2	A	21.25%	25.56%	3.47%	5.56%	8.56%	8.47%
651X0	A	18.51%	23.07%	3.18%	4.40%	7.07%	7.66%
661X0	A	15.39%	21.09%	2.23%	3.22%	5.96%	5.94%
672X1	A	15.39%	21.09%	2.23%	3.22%	5.96%	5.94%
672X2	A	12.42%	17.92%	1.71%	2.26%	4.99%	5.12%
673X0	A	12.42%	17.92%	1.71%	2.26%	4.99%	5.12%
701X0	A	26.52%	26.14%	4.31%	4.73%	12.36%	8.40%
702X0	A	32.39%	32.42%	7.86%	8.51%	16.43%	12.67%
703X0	G	37.25%	33.52%	10.16%	9.31%	19.64%	13.03%
705X0	A	25.07%	28.18%	4.46%	6.46%	11.45%	10.15%
732X0	A	25.07%	28.18%	4.46%	6.46%	11.45%	10.15%
732X1	A	25.07%	28.18%	4.46%	6.46%	11.45%	10.15%
732X4	A	21.31%	25.62%	3.48%	5.57%	8.59%	8.49%
733X1	G	23.63%	17.30%	3.19%	1.99%	8.36%	4.67%
734X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
741X1	A	34.62%	33.43%	9.15%	9.08%	18.63%	13.06%
742X0	A	15.07%	19.26%	1.96%	2.39%	5.63%	5.30%
751X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
751X2	G	32.64%	27.17%	6.51%	5.31%	14.97%	8.64%
751X3	G	23.63%	17.30%	3.19%	1.99%	8.36%	4.67%
753X0	G	25.40%	19.22%	5.86%	4.18%	12.06%	6.47%
753X1	M	31.47%	8.04%	3.87%	0.37%	12.06%	1.78%
791X0	G	20.33%	13.95%	2.22%	1.31%	6.12%	3.03%
791X1	G	20.33%	13.95%	2.22%	1.31%	6.12%	3.03%
791X2	G	20.33%	13.95%	2.22%	1.31%	6.12%	3.03%
811X0	G	35.85%	10.77%	9.78%	2.99%	18.90%	4.19%
811X2	G	35.91%	10.40%	9.40%	2.62%	18.37%	3.86%
821X0	G	33.27%	9.28%	7.68%	2.02%	15.79%	3.12%
871X0	A	37.84%	33.75%	10.32%	9.38%	19.95%	13.13%
872X0	A	37.84%	33.75%	10.32%	9.38%	19.95%	13.13%
902X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
902X1	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
902X2	G	34.55%	28.89%	7.97%	6.29%	16.40%	9.73%
903X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
903X1	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
905X0	G	33.79%	27.37%	7.80%	5.96%	16.04%	9.22%
906X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
907X0	G	32.64%	27.17%	6.51%	5.31%	14.97%	8.64%
908X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
911X0	G	34.57%	28.92%	7.98%	6.30%	16.41%	9.74%
912X5	G	30.06%	24.44%	5.47%	4.34%	12.76%	6.94%
913X0	G	31.53%	25.52%	6.29%	4.99%	14.46%	8.11%

Based Upon Model Results.

Combined Qualification Rates (Q) by Category, by AFSC

AFSC	TYPE	WM	WF	BM	BF	HM	HF
913X1	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
914X0	G	29.37%	23.16%	5.35%	4.11%	12.47%	6.58%
914X1	G	31.87%	25.72%	6.36%	5.02%	14.61%	8.18%
915X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
918X0	E	23.89%	11.84%	2.77%	1.11%	9.86%	2.49%
919X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
924X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
924X1	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
925X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
926X0	G	34.60%	28.93%	7.99%	6.30%	16.43%	9.74%
981X0	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
982X0	G	29.27%	23.13%	5.33%	4.10%	12.43%	6.57%
995X0	G	36.06%	31.53%	9.83%	8.76%	19.01%	12.26%
995X1	G	38.28%	34.06%	10.44%	9.46%	20.18%	13.25%
995X2	G	31.60%	25.53%	6.30%	4.99%	14.49%	8.11%
995X3	G	27.95%	22.53%	7.62%	6.26%	14.74%	8.76%
995X4	M	35.41%	18.19%	6.74%	1.20%	16.12%	5.41%
995X5	G	30.90%	1.94%	8.43%	0.54%	16.29%	0.75%
995X6	E	34.20%	22.50%	7.47%	4.61%	15.25%	7.52%
996X0	G	31.60%	25.53%	6.30%	4.99%	14.49%	8.11%
996X1	G	37.41%	31.73%	10.20%	8.81%	19.73%	12.34%
996X2	G	37.41%	31.73%	10.20%	8.81%	19.73%	12.34%
996X3	A	34.62%	33.43%	9.15%	9.08%	18.63%	13.06%
996X4	A	30.81%	10.33%	7.47%	2.71%	15.63%	4.04%
996X5	G	37.33%	32.20%	10.18%	8.94%	19.68%	12.52%
996X7	G	34.64%	28.96%	8.00%	6.31%	16.44%	9.75%
996X8	G	36.79%	31.73%	10.03%	8.81%	19.40%	12.34%
997X1	A	32.62%	32.42%	7.91%	8.51%	16.55%	12.67%
997X2	G	37.39%	32.46%	9.79%	8.19%	19.13%	12.06%

TABLE A-2

PERCENTAGE BY CATEGORY OF QUALIFIED AND WILLING TO ENLIST (QMA_{kj})

This table shows, for each AFSC, the percentage, by category, of those qualified and willing to enlist. The positive propensities displayed in Table 3-17 were used to scale down the qualified percentages presented in Table A-1 on the previous pages. Table A-2 contains the solutions for equation 7) reprinted here as:

$$7) \quad QMA_{kj} = Q_{kj} * WILLING_{kj}.$$

For example, 3.26% of the white males are expected to be both qualified and willing to enter AFSC 100X0.

Combined Qualified and Willing Rates (QMA) by Category, by AFSC

AFSC	TYPE	WM	WF	BM	BF	HM	HF
100X0	A	3.26%	1.41%	1.20%	0.97%	2.86%	1.72%
111X0	G	4.22%	0.46%	2.02%	0.30%	3.85%	0.53%
112X0	G	3.97%	0.43%	1.65%	0.25%	3.50%	0.47%
113X0	E	4.58%	0.49%	2.47%	0.36%	4.45%	0.56%
114X0	M	4.27%	0.23%	1.49%	0.04%	3.49%	0.19%
115X0	G	3.24%	0.33%	1.55%	0.22%	2.96%	0.38%
116X0	G	4.40%	1.35%	2.11%	0.88%	4.02%	1.54%
121X0	G	3.48%	0.08%	1.67%	0.05%	3.18%	0.09%
122X0	G	4.79%	0.55%	2.71%	0.46%	4.86%	0.72%
201X0	G	4.49%	1.44%	2.15%	0.94%	4.10%	1.65%
201X1	G	2.64%	0.70%	0.60%	0.20%	1.53%	0.51%
202X0	G	3.40%	1.00%	1.00%	0.37%	2.40%	0.94%
203X0	G	2.56%	0.68%	0.58%	0.19%	1.49%	0.50%
205X0	G	2.57%	0.67%	0.58%	0.19%	1.49%	0.50%
206X0	G	3.06%	0.86%	0.86%	0.30%	2.09%	0.79%
207X1	A	3.16%	1.38%	1.17%	0.95%	2.78%	1.69%
207X2	A	3.16%	1.38%	1.17%	0.95%	2.78%	1.69%
208X0	G	2.56%	0.68%	0.58%	0.19%	1.49%	0.50%
208X1	G	2.56%	0.68%	0.58%	0.19%	1.49%	0.50%
208X2	G	2.56%	0.68%	0.58%	0.19%	1.49%	0.50%
208X3	G	2.56%	0.68%	0.58%	0.19%	1.49%	0.50%
208X4	G	2.56%	0.68%	0.58%	0.19%	1.49%	0.50%
208X5	G	2.56%	0.68%	0.58%	0.19%	1.49%	0.50%
209X0	G	3.40%	1.00%	1.00%	0.37%	2.40%	0.94%
222X0	G	4.43%	0.49%	2.13%	0.32%	4.05%	0.56%
231X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
231X1	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
231X2	G	3.48%	1.03%	1.67%	0.67%	3.18%	1.18%
232X0	G	3.32%	0.99%	0.97%	0.37%	2.35%	0.93%
233X0	G	4.49%	1.44%	2.15%	0.94%	4.10%	1.65%
233X1	G	4.49%	1.44%	2.15%	0.94%	4.10%	1.65%
241X0	G	3.88%	1.22%	1.47%	0.65%	3.17%	1.17%
242X0	G	3.33%	0.95%	0.98%	0.36%	2.36%	0.89%
251X0	G	3.31%	0.95%	0.97%	0.36%	2.35%	0.89%
271X1	A	3.64%	1.51%	1.47%	1.12%	3.33%	1.91%
271X2	A	3.64%	1.51%	1.47%	1.12%	3.33%	1.91%
272X0	G	4.40%	1.35%	2.11%	0.88%	4.02%	1.54%
273X0	G	4.40%	1.35%	2.11%	0.88%	4.02%	1.54%
274X0	G	4.15%	1.27%	1.72%	0.74%	3.66%	1.37%
275X0	G	3.94%	0.45%	1.63%	0.26%	3.47%	0.49%
276X0	G	3.13%	0.90%	1.30%	0.53%	2.76%	0.98%
277X0	E	3.88%	0.90%	1.19%	0.39%	3.10%	0.85%
291X0	G	4.37%	1.42%	2.10%	0.93%	3.99%	1.63%
293X3	A	3.19%	1.31%	1.18%	0.90%	2.80%	1.61%
295X0	G	4.37%	1.42%	2.10%	0.93%	3.99%	1.63%
296X0	G	3.41%	1.00%	1.00%	0.38%	2.42%	0.95%
297X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
302X0	E	3.52%	0.75%	0.97%	0.25%	2.89%	0.57%
302X1	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
303X1	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
303X2	E	2.19%	0.39%	0.36%	0.07%	1.63%	0.26%
303X3	E	2.76%	0.50%	0.61%	0.09%	2.04%	0.33%
304X0	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
304X1	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%

Based Upon Model Results.

Combined Qualified and Willing Rates (QMA) by Category, by AFSC

AFSC	TYPE	WM	WF	BM	BF	HM	HF
304X4	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
304X5	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
304X6	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
305X4	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
306X0	E	3.17%	0.62%	0.76%	0.18%	2.52%	0.45%
306X1	E	3.51%	0.75%	0.97%	0.25%	2.88%	0.57%
306X2	E	3.17%	0.62%	0.76%	0.18%	2.52%	0.45%
307X0	E	3.17%	0.62%	0.76%	0.18%	2.52%	0.45%
309X0	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
316X0	E	2.34%	0.42%	0.56%	0.12%	1.86%	0.30%
316X1	E	2.54%	0.04%	0.61%	0.01%	2.01%	0.03%
316X2	E	3.04%	0.21%	0.73%	0.06%	2.41%	0.15%
316X3	E	3.17%	0.62%	0.76%	0.18%	2.52%	0.45%
321X0	E	3.04%	0.21%	0.73%	0.06%	2.41%	0.15%
321X1	E	3.04%	0.21%	0.73%	0.06%	2.41%	0.15%
321X2	E	3.10%	0.62%	0.75%	0.17%	2.46%	0.44%
322X2	E	2.69%	0.49%	0.60%	0.09%	1.98%	0.32%
323X1	E	3.04%	0.21%	0.73%	0.06%	2.41%	0.15%
323X2	E	3.09%	0.61%	0.74%	0.17%	2.45%	0.44%
323X3	E	3.04%	0.21%	0.73%	0.06%	2.41%	0.15%
324X0	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
325X0	E	3.05%	0.59%	0.73%	0.16%	2.42%	0.42%
325X1	E	3.05%	0.59%	0.73%	0.16%	2.42%	0.42%
326X0	E	2.19%	0.37%	0.36%	0.07%	1.63%	0.25%
326X3	E	3.10%	0.59%	0.75%	0.16%	2.46%	0.42%
326X4	E	3.10%	0.59%	0.75%	0.16%	2.46%	0.42%
326X5	E	3.10%	0.59%	0.75%	0.16%	2.46%	0.42%
326X6	E	3.05%	0.21%	0.73%	0.06%	2.42%	0.15%
326X7	E	3.05%	0.21%	0.73%	0.06%	2.42%	0.15%
326X8	E	3.38%	0.25%	0.93%	0.08%	2.77%	0.19%
328X0	E	3.10%	0.62%	0.75%	0.17%	2.46%	0.44%
328X1	E	3.10%	0.62%	0.75%	0.17%	2.46%	0.44%
328X2	E	3.10%	0.62%	0.75%	0.17%	2.46%	0.44%
328X3	E	2.54%	0.04%	0.61%	0.01%	2.02%	0.03%
328X4	E	3.05%	0.21%	0.73%	0.06%	2.42%	0.15%
328X5	E	3.11%	0.58%	0.75%	0.16%	2.47%	0.42%
341X1	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
341X2	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
341X4	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
341X6	E	3.18%	0.63%	0.77%	0.18%	2.53%	0.45%
341X7	E	3.17%	0.62%	0.76%	0.18%	2.52%	0.45%
361X0	M	3.53%	0.04%	1.24%	0.01%	2.88%	0.03%
361X1	M	4.44%	0.25%	1.55%	0.04%	3.63%	0.20%
362X1	E	4.55%	1.21%	2.06%	0.74%	3.90%	1.37%
362X3	E	4.54%	1.20%	2.06%	0.74%	3.89%	1.37%
362X4	E	4.33%	0.38%	1.96%	0.24%	3.71%	0.44%
391X0	G	4.24%	1.36%	1.76%	0.80%	3.74%	1.47%
392X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
404X0	E	4.77%	1.42%	2.49%	0.94%	4.31%	1.65%
404X1	E	4.55%	1.21%	2.06%	0.74%	3.90%	1.37%
423X0	E	4.46%	0.44%	2.21%	0.28%	3.96%	0.50%
423X1	M	4.51%	0.33%	1.78%	0.06%	3.95%	0.33%
423X2	E	3.91%	0.09%	2.11%	0.07%	3.80%	0.10%
423X3	M	4.37%	0.25%	1.53%	0.04%	3.57%	0.20%

Based Upon Model Results.

Combined Qualified and Willing Rates (QMA) by Category, by AFSC

FSC	TYPE	WM	WF	BM	BF	HM	HF
23X4	E	4.57%	0.47%	2.38%	0.31%	4.13%	0.55%
23X5	M	4.32%	0.24%	1.53%	0.04%	3.36%	0.20%
26X1	M	4.29%	0.53%	1.34%	0.07%	3.42%	0.60%
26X2	M	4.51%	0.33%	1.78%	0.06%	3.95%	0.33%
26X3	M	4.44%	0.73%	1.55%	0.12%	3.62%	0.60%
26X4	M	4.51%	0.33%	1.78%	0.06%	3.95%	0.33%
27X0	M	4.44%	0.73%	1.55%	0.12%	3.62%	0.60%
27X1	M	4.44%	0.73%	1.55%	0.12%	3.62%	0.60%
27X2	G	4.38%	1.42%	2.10%	0.93%	4.00%	1.63%
27X3	M	4.58%	0.96%	1.81%	0.19%	4.01%	0.97%
27X4	M	4.44%	0.73%	1.55%	0.12%	3.62%	0.60%
27X5	M	4.44%	0.73%	1.55%	0.12%	3.62%	0.60%
31X0	M	3.52%	0.03%	1.10%	.00%	2.81%	0.04%
31X1	M	4.37%	0.25%	1.53%	0.04%	3.57%	0.20%
31X2	M	4.37%	0.25%	1.53%	0.04%	3.57%	0.20%
31X3	M	4.37%	0.25%	1.53%	0.04%	3.57%	0.20%
31X4	M	4.37%	0.25%	1.53%	0.04%	3.57%	0.20%
43X0	M	2.78%	0.03%	0.97%	0.01%	2.26%	0.03%
45X0	E	3.61%	1.03%	1.94%	0.75%	3.50%	1.18%
45X1	M	3.28%	0.17%	1.15%	0.03%	2.68%	0.14%
51X0	M	4.10%	0.40%	1.05%	0.06%	3.02%	0.30%
52X0	M	4.03%	0.14%	1.03%	0.02%	2.97%	0.10%
53X0	M	4.10%	0.40%	1.05%	0.06%	3.02%	0.30%
54X0	M	3.91%	0.39%	0.87%	0.06%	2.69%	0.28%
72X0	M	4.44%	0.73%	1.55%	0.12%	3.62%	0.60%
72X1	M	4.58%	0.96%	1.81%	0.19%	4.01%	0.97%
72X2	M	4.44%	0.73%	1.55%	0.12%	3.62%	0.60%
72X3	M	4.29%	0.53%	1.34%	0.07%	3.42%	0.60%
72X4	A	3.17%	1.39%	1.17%	0.95%	2.79%	1.70%
11X0	G	4.71%	1.56%	2.37%	1.16%	4.46%	1.91%
11X1	G	3.91%	1.22%	1.48%	0.65%	3.19%	1.18%
12X0	E	4.88%	1.54%	2.63%	1.12%	4.74%	1.77%
12X1	E	3.88%	0.09%	2.09%	0.06%	3.77%	0.10%
12X2	M	4.08%	0.17%	1.25%	0.02%	3.02%	0.14%
15X0	E	3.91%	0.09%	2.10%	0.06%	3.80%	0.10%
15X1	M	4.44%	0.73%	1.55%	0.12%	3.62%	0.60%
15X2	E	3.91%	0.09%	2.10%	0.06%	3.80%	0.10%
15X3	E	4.88%	1.54%	2.63%	1.12%	4.74%	1.77%
11X0	M	4.58%	0.96%	1.81%	0.19%	4.01%	0.97%
11X1	M	4.58%	0.96%	1.81%	0.19%	4.01%	0.97%
2X0	M	4.37%	0.25%	1.53%	0.04%	3.56%	0.20%
2X1	M	4.51%	0.32%	1.78%	0.06%	3.95%	0.33%
2X2	M	4.58%	0.96%	1.81%	0.19%	4.01%	0.97%
2X4	M	4.70%	0.97%	1.86%	0.19%	4.11%	0.99%
2X5	M	4.55%	0.74%	1.59%	0.12%	3.71%	0.61%
3X0	G	4.23%	1.35%	1.75%	0.79%	3.73%	1.46%
4X0	A	3.25%	1.41%	1.20%	0.97%	2.86%	1.72%
5X0	G	4.49%	1.44%	2.15%	0.94%	4.10%	1.65%
6X0	G	4.70%	1.56%	2.37%	1.15%	4.44%	1.91%
6X1	M	4.62%	0.33%	1.83%	0.07%	4.05%	0.33%
1X0	G	3.74%	0.09%	1.88%	0.07%	3.54%	0.11%
1X0	M	4.58%	0.96%	1.81%	0.19%	4.01%	0.97%
1X1	M	4.58%	0.96%	1.81%	0.19%	4.01%	0.97%
2X0	A	3.64%	1.51%	1.47%	1.12%	3.33%	1.91%

sed Upon Model Results.

SIMULATED WITHIN AFSC DISTRIBUTION - EQUAL MALE/FEMALE PROPENSITY

AFSC	TYPE	WM	WF	BM	BF	HM	HF
913X1	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
914X0	G	51.07%	38.51%	3.22%	2.48%	3.15%	1.58%
914X1	G	50.06%	38.64%	3.46%	2.74%	3.33%	1.78%
915X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
918X0	E	62.32%	29.54%	2.50%	1.00%	3.73%	0.90%
919X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
924X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
924X1	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
925X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
926X0	G	48.77%	39.00%	3.90%	3.08%	3.36%	1.90%
981X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
982X0	G	51.03%	38.55%	3.22%	2.48%	3.14%	1.58%
995X0	G	46.76%	39.11%	4.42%	3.94%	3.58%	2.20%
995X1	G	46.39%	39.48%	4.38%	3.98%	3.55%	2.22%
995X2	G	50.04%	38.66%	3.46%	2.74%	3.33%	1.78%
995X3	G	48.48%	37.37%	4.58%	3.76%	3.71%	2.10%
995X4	M	60.38%	29.66%	3.98%	0.71%	3.99%	1.28%
995X5	G	80.62%	4.84%	7.61%	0.49%	6.17%	0.27%
995X6	E	54.15%	34.07%	4.09%	2.53%	3.50%	1.65%
996X0	G	50.04%	38.66%	3.46%	2.74%	3.33%	1.78%
996X1	G	47.41%	38.45%	4.48%	3.87%	3.63%	2.16%
996X2	G	47.41%	38.45%	4.48%	3.87%	3.63%	2.16%
996X3	A	44.72%	41.30%	4.09%	4.07%	3.49%	2.33%
996X4	A	65.49%	21.00%	5.50%	2.00%	4.82%	1.19%
996X5	G	47.05%	38.81%	4.44%	3.91%	3.60%	2.18%
996X7	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
996X8	G	47.06%	38.81%	4.44%	3.91%	3.60%	2.18%
997X1	A	44.40%	42.20%	3.73%	4.01%	3.27%	2.38%
997X2	G	47.26%	39.25%	4.28%	3.59%	3.51%	2.11%

SIMULATED WITHIN AFSC DISTRIBUTION - EQUAL MALE/FEMALE PROPENSITY

AFSC	TYPE	WM	WF	BM	BF	HM	HF
602X1	A	43.25%	44.49%	2.90%	3.98%	2.99%	2.39%
602X2	G	46.16%	39.72%	4.36%	4.00%	3.53%	2.23%
603X0	M	59.25%	30.87%	3.91%	0.74%	3.91%	1.33%
605X0	A	44.02%	42.59%	3.70%	4.05%	3.24%	2.41%
605X1	G	46.17%	39.71%	4.36%	4.00%	3.53%	2.23%
611X0	A	44.72%	41.30%	4.09%	4.07%	3.49%	2.33%
612X0	G	66.27%	19.36%	6.26%	1.95%	5.07%	1.09%
612X1	A	44.72%	41.30%	4.09%	4.07%	3.49%	2.33%
622X0	G	46.39%	39.48%	4.38%	3.98%	3.55%	2.22%
631X0	G	78.77%	11.77%	4.19%	0.22%	4.63%	0.42%
645X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
645X1	G	46.39%	39.49%	4.38%	3.98%	3.55%	2.22%
645X2	A	41.47%	47.71%	2.35%	3.76%	2.43%	2.29%
651X0	A	40.88%	48.72%	2.43%	3.37%	2.27%	2.34%
661X0	A	39.32%	51.55%	1.97%	2.85%	2.21%	2.10%
672X1	A	39.32%	51.55%	1.97%	2.85%	2.21%	2.10%
672X2	A	38.36%	52.96%	1.83%	2.42%	2.24%	2.19%
673X0	A	38.36%	52.96%	1.83%	2.42%	2.24%	2.19%
701X0	A	46.03%	43.40%	2.59%	2.85%	3.11%	2.02%
702X0	A	44.25%	42.36%	3.72%	4.03%	3.26%	2.39%
703X0	G	46.16%	39.72%	4.36%	4.00%	3.53%	2.23%
705X0	A	42.59%	45.78%	2.62%	3.81%	2.82%	2.38%
732X0	A	42.59%	45.78%	2.62%	3.81%	2.82%	2.38%
732X1	A	42.59%	45.78%	2.62%	3.81%	2.82%	2.38%
732X4	A	41.48%	47.70%	2.35%	3.76%	2.43%	2.29%
733X1	G	53.92%	37.75%	2.52%	1.58%	2.77%	1.47%
734X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
741X1	A	44.72%	41.30%	4.09%	4.07%	3.49%	2.33%
742X0	A	41.24%	50.39%	1.86%	2.27%	2.23%	2.00%
751X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
751X2	G	49.39%	39.32%	3.41%	2.78%	3.29%	1.81%
751X3	G	53.92%	37.75%	2.52%	1.58%	2.77%	1.47%
753X0	G	50.90%	36.82%	4.07%	2.91%	3.51%	1.79%
753X1	M	73.84%	18.03%	3.14%	0.30%	4.11%	0.58%
791X0	G	56.16%	36.85%	2.13%	1.25%	2.46%	1.16%
791X1	G	56.16%	36.85%	2.13%	1.25%	2.46%	1.16%
791X2	G	56.16%	36.85%	2.13%	1.25%	2.46%	1.16%
811X0	G	66.53%	19.10%	6.28%	1.92%	5.09%	1.07%
811X2	G	67.47%	18.69%	6.12%	1.71%	5.01%	1.00%
821X0	G	68.99%	18.40%	5.51%	1.45%	4.75%	0.90%
871X0	A	46.34%	39.54%	4.38%	3.98%	3.55%	2.22%
872X0	A	46.34%	39.54%	4.38%	3.98%	3.55%	2.22%
902X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
902X1	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
902X2	G	48.77%	39.00%	3.90%	3.08%	3.36%	1.90%
903X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
903X1	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
905X0	G	49.44%	38.31%	3.95%	3.02%	3.41%	1.86%
906X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
907X0	G	49.39%	39.32%	3.41%	2.78%	3.29%	1.81%
908X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
911X0	G	48.76%	39.01%	3.90%	3.08%	3.36%	1.90%
912X5	G	50.40%	39.19%	3.18%	2.52%	3.11%	1.61%
913X0	G	50.00%	38.70%	3.45%	2.74%	3.33%	1.78%

Based Upon Model Results.

SIMULATED WITHIN AFSC DISTRIBUTION - EQUAL MALE/FEMALE PROPENSITY

AFSC	TYPE	WM	WF	BM	BF	HM	HF
23X4	E	69.16%	17.81%	6.02%	1.42%	4.72%	0.88%
23X5	M	79.07%	11.01%	4.66%	0.22%	4.64%	0.39%
26X1	M	69.62%	21.22%	3.63%	0.32%	4.19%	1.03%
26X2	M	75.58%	13.53%	4.98%	0.32%	4.99%	0.58%
26X3	M	64.51%	26.31%	3.76%	0.52%	3.97%	0.92%
26X4	M	75.58%	13.53%	4.98%	0.32%	4.99%	0.58%
27X0	M	64.51%	26.31%	3.76%	0.52%	3.97%	0.92%
27X1	M	64.51%	26.31%	3.76%	0.52%	3.97%	0.92%
27X2	G	48.54%	39.23%	3.88%	3.10%	3.34%	1.91%
27X3	M	59.24%	30.87%	3.91%	0.74%	3.91%	1.33%
27X4	M	64.51%	26.31%	3.76%	0.52%	3.97%	0.92%
27X5	M	64.51%	26.31%	3.76%	0.52%	3.97%	0.92%
31X0	M	88.05%	1.94%	4.59%	0.03%	5.30%	0.09%
31X1	M	78.88%	11.06%	4.60%	0.22%	4.86%	0.39%
31X2	M	78.88%	11.06%	4.60%	0.22%	4.86%	0.39%
31X3	M	78.88%	11.06%	4.60%	0.22%	4.86%	0.39%
31X4	M	78.88%	11.06%	4.60%	0.22%	4.86%	0.39%
43X0	M	86.73%	2.72%	5.06%	0.05%	5.34%	0.09%
45X0	E	50.79%	36.01%	4.56%	3.16%	3.72%	1.76%
45X1	M	79.65%	10.24%	4.65%	0.20%	4.90%	0.36%
61X0	M	73.83%	18.04%	3.14%	0.30%	4.11%	0.58%
62X0	M	84.30%	7.08%	3.59%	0.12%	4.69%	0.23%
63X0	M	73.83%	18.04%	3.14%	0.30%	4.11%	0.58%
64X0	M	74.10%	18.43%	2.74%	0.32%	3.85%	0.57%
72X0	M	64.51%	26.31%	3.76%	0.52%	3.97%	0.92%
72X1	M	59.24%	30.87%	3.91%	0.74%	3.91%	1.33%
72X2	M	64.51%	26.31%	3.76%	0.52%	3.97%	0.92%
72X3	M	69.62%	21.22%	3.63%	0.32%	4.19%	1.03%
72X4	A	42.34%	46.02%	2.61%	3.83%	2.81%	2.39%
11X0	G	47.69%	39.33%	4.01%	3.52%	3.40%	2.05%
11X1	G	50.39%	39.19%	3.18%	2.52%	3.11%	1.61%
42X0	E	48.64%	38.20%	4.37%	3.36%	3.57%	1.86%
42X1	E	81.50%	4.58%	7.32%	0.40%	5.97%	0.22%
42X2	M	82.07%	8.70%	4.20%	0.13%	4.58%	0.31%
45X0	E	81.52%	4.56%	7.32%	0.40%	5.98%	0.22%
45X1	M	64.51%	26.31%	3.76%	0.52%	3.97%	0.92%
45X2	E	81.52%	4.56%	7.32%	0.40%	5.98%	0.22%
45X3	E	48.64%	38.20%	4.37%	3.36%	3.57%	1.86%
51X0	M	59.25%	30.87%	3.91%	0.74%	3.91%	1.33%
51X1	M	59.25%	30.87%	3.91%	0.74%	3.91%	1.33%
52X0	M	78.88%	11.05%	4.60%	0.22%	4.86%	0.39%
52X1	M	75.59%	13.53%	4.98%	0.32%	4.99%	0.58%
52X2	M	59.25%	30.87%	3.91%	0.74%	3.91%	1.33%
52X4	M	59.45%	30.65%	3.92%	0.74%	3.93%	1.32%
52X5	M	64.70%	26.11%	3.77%	0.52%	3.98%	0.91%
53X0	G	49.39%	39.32%	3.41%	2.78%	3.29%	1.81%
54X0	A	42.58%	45.79%	2.62%	3.81%	2.82%	2.38%
55X0	G	48.77%	39.00%	3.90%	3.08%	3.36%	1.90%
56X0	G	47.69%	39.34%	4.01%	3.52%	3.40%	2.05%
56X1	M	75.71%	13.40%	4.99%	0.32%	5.00%	0.58%
51X0	G	81.78%	4.83%	6.87%	0.43%	5.84%	0.25%
11X0	M	59.24%	30.87%	3.91%	0.74%	3.91%	1.33%
11X1	M	59.24%	30.87%	3.91%	0.74%	3.91%	1.33%
52X0	A	43.25%	44.49%	2.90%	3.98%	2.99%	2.39%

Based Upon Model Results.

SIMULATED WITHIN AFSC DISTRIBUTION - EQUAL MALE/FEMALE PROPENSITY

AFSC	TYPE	WM	WF	BM	BF	HM	HF
304X4	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
304X5	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
304X6	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
305X4	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
306X0	E	61.72%	30.16%	2.48%	1.02%	3.70%	0.92%
306X1	E	59.75%	31.53%	2.74%	1.25%	3.70%	1.03%
306X2	E	61.72%	30.16%	2.48%	1.02%	3.70%	0.92%
307X0	E	61.72%	30.16%	2.48%	1.02%	3.70%	0.92%
309X0	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
316X0	E	63.69%	28.12%	2.56%	0.96%	3.82%	0.86%
316X1	E	87.86%	3.14%	3.53%	0.11%	5.27%	0.10%
316X2	E	78.08%	13.26%	3.13%	0.45%	4.68%	0.40%
316X3	E	61.72%	30.16%	2.48%	1.02%	3.70%	0.92%
321X0	E	78.08%	13.26%	3.13%	0.45%	4.68%	0.40%
321X1	E	78.08%	13.26%	3.13%	0.45%	4.68%	0.40%
321X2	E	61.49%	30.40%	2.47%	1.03%	3.68%	0.92%
322X2	E	63.88%	28.76%	2.37%	0.62%	3.55%	0.81%
323X1	E	78.08%	13.26%	3.13%	0.45%	4.68%	0.40%
323X2	E	61.50%	30.39%	2.47%	1.03%	3.69%	0.92%
323X3	E	78.08%	13.26%	3.13%	0.45%	4.68%	0.40%
324X0	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
325X0	E	62.12%	29.75%	2.49%	1.01%	3.72%	0.90%
325X1	E	62.12%	29.75%	2.49%	1.01%	3.72%	0.90%
326X0	E	65.47%	27.66%	1.79%	0.62%	3.67%	0.78%
326X3	E	62.43%	29.43%	2.51%	1.00%	3.74%	0.89%
326X4	E	62.43%	29.43%	2.51%	1.00%	3.74%	0.89%
326X5	E	62.43%	29.43%	2.51%	1.00%	3.74%	0.89%
326X6	E	78.07%	13.26%	3.13%	0.45%	4.68%	0.40%
326X7	E	78.07%	13.26%	3.13%	0.45%	4.68%	0.40%
326X8	E	76.66%	14.06%	3.52%	0.56%	4.74%	0.46%
328X0	E	61.49%	30.40%	2.47%	1.03%	3.68%	0.92%
328X1	E	61.49%	30.40%	2.47%	1.03%	3.68%	0.92%
328X2	E	61.49%	30.40%	2.47%	1.03%	3.68%	0.92%
328X3	E	87.87%	3.14%	3.53%	0.11%	5.27%	0.10%
328X4	E	78.07%	13.26%	3.13%	0.45%	4.68%	0.40%
328X5	E	62.65%	29.20%	2.51%	0.99%	3.75%	0.89%
341X1	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
341X2	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
341X4	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
341X6	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
341X7	E	61.72%	30.16%	2.48%	1.02%	3.70%	0.92%
361X0	M	86.89%	2.55%	5.07%	0.05%	5.35%	0.09%
361X1	M	78.97%	10.96%	4.61%	0.22%	4.86%	0.38%
362X1	E	53.13%	35.11%	4.02%	2.61%	3.44%	1.69%
362X3	E	53.16%	35.08%	4.02%	2.61%	3.44%	1.69%
362X4	E	72.02%	15.92%	5.44%	1.18%	4.66%	0.77%
391X0	G	49.39%	39.32%	3.41%	2.78%	3.29%	1.81%
392X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
404X0	E	50.19%	37.21%	4.37%	2.97%	3.43%	1.83%
404X1	E	53.15%	35.09%	4.02%	2.61%	3.44%	1.69%
423X0	E	70.14%	17.23%	5.79%	1.30%	4.71%	0.84%
423X1	M	75.58%	13.53%	4.98%	0.32%	4.99%	0.58%
423X2	E	81.42%	4.67%	7.31%	0.41%	5.97%	0.23%
423X3	M	78.88%	11.06%	4.60%	0.22%	4.86%	0.39%

Based Upon Model Results.

A-21

SIMULATED WITHIN AFSC DISTRIBUTION - EQUAL MALE/FEMALE PROPENSITY

AFSC	TYPE	WM	WF	BM	BF	HM	HF
100X0	A	42.59%	45.78%	2.62%	3.81%	2.82%	2.38%
111X0	G	68.78%	18.61%	5.50%	1.47%	4.74%	0.91%
112X0	G	69.62%	18.75%	4.81%	1.33%	4.63%	0.86%
113X0	E	68.25%	18.14%	6.13%	1.59%	5.00%	0.88%
114X0	M	79.12%	10.80%	4.62%	0.22%	4.87%	0.38%
115X0	G	69.59%	17.78%	5.56%	1.40%	4.80%	0.87%
116X0	G	49.80%	37.94%	3.98%	3.00%	3.43%	1.85%
121X0	G	82.34%	4.79%	6.58%	0.38%	5.67%	0.23%
122X0	G	66.70%	18.93%	6.30%	1.91%	5.10%	1.06%
201X0	G	48.78%	38.98%	3.90%	3.08%	3.36%	1.90%
201X1	G	56.17%	36.83%	2.13%	1.25%	2.46%	1.16%
202X0	G	52.73%	38.59%	2.58%	1.75%	2.82%	1.54%
203X0	G	55.92%	37.10%	2.12%	1.26%	2.44%	1.16%
205X0	G	56.37%	36.63%	2.14%	1.24%	2.46%	1.15%
206X0	G	53.93%	37.74%	2.52%	1.58%	2.77%	1.47%
207X1	A	42.34%	46.02%	2.61%	3.83%	2.81%	2.39%
207X2	A	42.34%	46.02%	2.61%	3.83%	2.81%	2.39%
208X0	G	55.93%	37.08%	2.12%	1.26%	2.45%	1.16%
208X1	G	55.93%	37.08%	2.12%	1.26%	2.45%	1.16%
208X2	G	55.93%	37.08%	2.12%	1.26%	2.45%	1.16%
208X3	G	55.93%	37.08%	2.12%	1.26%	2.45%	1.16%
208X4	G	55.93%	37.08%	2.12%	1.26%	2.45%	1.16%
208X5	G	55.93%	37.08%	2.12%	1.26%	2.45%	1.16%
209X0	G	52.73%	38.59%	2.58%	1.75%	2.82%	1.54%
222X0	G	68.57%	18.82%	5.48%	1.49%	4.72%	0.92%
231X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
231X1	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
231X2	G	50.51%	37.23%	4.04%	2.94%	3.48%	1.81%
232X0	G	52.47%	38.84%	2.57%	1.76%	2.80%	1.55%
233X0	G	48.78%	38.98%	3.90%	3.08%	3.36%	1.90%
233X1	G	48.78%	38.98%	3.90%	3.08%	3.36%	1.90%
241X0	G	50.37%	39.22%	3.17%	2.52%	3.10%	1.61%
242X0	G	53.41%	37.90%	2.61%	1.72%	2.85%	1.52%
251X0	G	53.37%	37.94%	2.61%	1.72%	2.85%	1.52%
271X1	A	43.25%	44.49%	2.90%	3.98%	2.99%	2.39%
271X2	A	43.25%	44.49%	2.90%	3.98%	2.99%	2.39%
272X0	G	49.80%	37.94%	3.98%	3.00%	3.43%	1.85%
273X0	G	49.80%	37.94%	3.98%	3.00%	3.43%	1.85%
274X0	G	50.43%	38.26%	3.48%	2.71%	3.36%	1.76%
275X0	G	68.80%	19.59%	4.75%	1.39%	4.58%	0.90%
276X0	G	51.59%	37.08%	3.56%	2.63%	3.43%	1.70%
277X0	E	57.41%	33.13%	2.93%	1.75%	3.46%	1.32%
291X0	G	48.55%	39.22%	3.88%	3.10%	3.35%	1.91%
293X3	A	43.65%	44.72%	2.69%	3.72%	2.89%	2.33%
295X0	G	48.55%	39.22%	3.88%	3.10%	3.35%	1.91%
296X0	G	52.72%	38.60%	2.58%	1.75%	2.82%	1.54%
297X0	G	48.77%	38.99%	3.90%	3.08%	3.36%	1.90%
302X0	E	59.74%	31.54%	2.74%	1.25%	3.70%	1.03%
302X1	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
303X1	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
303X2	E	64.56%	28.61%	1.77%	0.64%	3.62%	0.81%
303X3	E	64.09%	28.54%	2.38%	0.62%	3.56%	0.80%
304X0	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%
304X1	E	61.71%	30.17%	2.48%	1.02%	3.70%	0.92%

Based Upon Model Results.

TABLE A-4
WITHIN AFS SEX-RACIAL/ETHNIC DISTRIBUTIONS UNDER
EQUAL ASSUMPTION OF INTEREST ACROSS SEX

This table contains the results for equation 8) under the alternative assumption that females are equally as willing to enlist as their male counterparts. Equation 8) is reprinted here as:

$$8) \quad \text{AFSDIST}_{kj} = \text{QMA}_{kj} / \sum_k \text{QMA}_{kj}.$$

For example, under this assumption, AFSC 100X0 accessions would be 42.59% white male, 45.78% white female, etc.

SIMULATED WITHIN AFSC BY CATEGORY DISTRIBUTION

AFSC	TYPE	WM	WF	BM	BF	HM	HF
913X1	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
914X0	G	68.37%	19.83%	4.31%	1.84%	4.21%	1.44%
914X1	G	67.25%	19.96%	4.64%	2.04%	4.48%	1.62%
915X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
918X0	E	76.85%	14.01%	3.08%	0.69%	4.61%	0.75%
919X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
924X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
924X1	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
925X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
926X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
981X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
982X0	G	68.34%	19.86%	4.31%	1.85%	4.21%	1.44%
995X0	G	63.64%	20.47%	6.01%	2.98%	4.87%	2.03%
995X1	G	63.35%	20.74%	5.98%	3.02%	4.85%	2.06%
995X2	G	67.24%	19.98%	4.64%	2.04%	4.47%	1.62%
995X3	G	64.93%	19.25%	6.13%	2.80%	4.97%	1.91%
995X4	M	74.52%	14.08%	4.91%	0.49%	4.92%	1.07%
995X5	G	83.35%	1.92%	7.87%	0.28%	6.38%	0.19%
995X6	E	69.98%	16.94%	5.29%	1.82%	4.53%	1.45%
996X0	G	67.24%	19.98%	4.64%	2.04%	4.47%	1.62%
996X1	G	64.13%	20.01%	6.06%	2.91%	4.91%	1.99%
996X2	G	64.13%	20.01%	6.06%	2.91%	4.91%	1.99%
996X3	A	62.08%	22.05%	5.68%	3.14%	4.85%	2.20%
996X4	A	76.32%	9.41%	6.41%	1.29%	5.62%	0.94%
996X5	G	63.86%	20.26%	6.03%	2.95%	4.89%	2.01%
996X7	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
996X8	G	63.87%	20.26%	6.03%	2.95%	4.89%	2.01%
997X1	A	62.12%	22.71%	5.22%	3.12%	4.57%	2.27%
997X2	G	64.24%	20.52%	5.82%	2.71%	4.77%	1.95%

SIMULATED WITHIN AFSC BY CATEGORY DISTRIBUTION

AFSC	TYPE	WM	WF	BM	BF	HM	HF
602X1	A	61.71%	24.41%	4.14%	3.16%	4.26%	2.32%
602X2	G	63.17%	20.91%	5.97%	3.04%	4.83%	2.08%
603X0	M	73.83%	14.79%	4.87%	0.51%	4.88%	1.12%
605X0	A	61.80%	23.00%	5.19%	3.16%	4.55%	2.30%
605X1	G	63.18%	20.90%	5.97%	3.04%	4.84%	2.08%
611X0	A	62.08%	22.05%	5.68%	3.14%	4.85%	2.20%
612X0	G	76.29%	8.57%	7.20%	1.25%	5.84%	0.85%
612X1	A	62.08%	22.05%	5.68%	3.14%	4.85%	2.20%
622X0	G	63.35%	20.74%	5.98%	3.02%	4.85%	2.06%
631X0	G	85.13%	4.89%	4.53%	0.13%	5.01%	0.31%
645X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
645X1	G	63.35%	20.74%	5.98%	3.02%	4.85%	2.06%
645X2	A	60.78%	26.89%	3.44%	3.06%	3.55%	2.28%
651X0	A	60.31%	27.65%	3.59%	2.76%	3.35%	2.35%
661X0	A	59.27%	29.89%	2.98%	2.39%	3.33%	2.15%
672X1	A	59.27%	29.89%	2.98%	2.39%	3.33%	2.15%
672X2	A	58.45%	31.03%	2.79%	2.05%	3.41%	2.27%
673X0	A	58.45%	31.03%	2.79%	2.05%	3.41%	2.27%
701X0	A	64.49%	23.38%	3.63%	2.22%	4.36%	1.92%
702X0	A	61.99%	22.82%	5.21%	3.14%	4.56%	2.28%
703X0	G	63.17%	20.91%	5.97%	3.04%	4.83%	2.08%
705X0	A	61.39%	25.38%	3.78%	3.05%	4.07%	2.33%
732X0	A	61.39%	25.38%	3.78%	3.05%	4.07%	2.33%
732X1	A	61.39%	25.38%	3.78%	3.05%	4.07%	2.33%
732X4	A	60.78%	26.89%	3.44%	3.06%	3.55%	2.28%
733X1	G	71.32%	19.20%	3.33%	1.16%	3.66%	1.32%
734X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
741X1	A	62.08%	22.05%	5.68%	3.14%	4.85%	2.20%
742X0	A	61.24%	28.78%	2.76%	1.87%	3.32%	2.02%
751X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
751X2	G	66.76%	20.44%	4.61%	2.09%	4.44%	1.66%
751X3	G	71.32%	19.20%	3.33%	1.16%	3.66%	1.32%
753X0	G	67.44%	18.77%	5.39%	2.14%	4.65%	1.61%
753X1	M	83.35%	7.83%	3.55%	0.19%	4.63%	0.44%
791X0	G	73.51%	18.55%	2.79%	0.91%	3.21%	1.03%
791X1	G	73.51%	18.55%	2.79%	0.91%	3.21%	1.03%
791X2	G	73.51%	18.55%	2.79%	0.91%	3.21%	1.03%
811X0	G	76.43%	8.44%	7.22%	1.23%	5.85%	0.84%
811X2	G	77.18%	8.22%	7.00%	1.09%	5.73%	0.78%
821X0	G	78.62%	8.07%	6.28%	0.92%	5.42%	0.69%
871X0	A	63.31%	20.78%	5.98%	3.02%	4.85%	2.06%
872X0	A	63.31%	20.78%	5.98%	3.02%	4.85%	2.06%
902X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
902X1	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
902X2	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
903X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
903X1	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
905X0	G	66.38%	19.78%	5.31%	2.26%	4.57%	1.70%
906X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
907X0	G	66.76%	20.44%	4.61%	2.09%	4.44%	1.66%
908X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
911X0	G	65.87%	20.27%	5.26%	2.31%	4.54%	1.74%
912X5	G	67.88%	20.30%	4.28%	1.89%	4.18%	1.47%
913X0	G	67.21%	20.01%	4.64%	2.05%	4.47%	1.63%

Source: Profile of American Youth, 1980.

SIMULATED WITHIN AFSC BY CATEGORY DISTRIBUTION

AFSC	TYPE	WM	WF	BM	BF	HM	HF
423X4	E	78.47%	7.77%	6.83%	0.90%	5.35%	0.68%
423X5	M	85.02%	4.55%	5.01%	0.13%	4.99%	0.29%
426X1	M	80.51%	9.44%	4.19%	0.21%	4.85%	0.81%
426X2	M	82.75%	5.70%	5.46%	0.20%	5.47%	0.43%
426X3	M	77.46%	12.15%	4.52%	0.35%	4.77%	0.75%
426X4	M	82.75%	5.70%	5.46%	0.20%	5.47%	0.43%
427X0	M	77.46%	12.15%	4.52%	0.35%	4.77%	0.75%
427X1	M	77.46%	12.15%	4.52%	0.35%	4.77%	0.75%
427X2	G	65.71%	20.43%	5.25%	2.33%	4.53%	1.76%
427X3	M	73.82%	14.80%	4.87%	0.51%	4.88%	1.13%
427X4	M	77.46%	12.15%	4.52%	0.35%	4.77%	0.75%
427X5	M	77.46%	12.15%	4.52%	0.35%	4.77%	0.75%
431X0	M	89.16%	0.75%	4.64%	0.02%	5.37%	0.06%
431X1	M	84.84%	4.57%	4.95%	0.13%	5.22%	0.28%
431X2	M	84.84%	4.57%	4.95%	0.13%	5.22%	0.28%
431X3	M	84.84%	4.57%	4.95%	0.13%	5.22%	0.28%
431X4	M	84.84%	4.57%	4.95%	0.13%	5.22%	0.28%
443X0	M	88.26%	1.06%	5.15%	0.03%	5.43%	0.07%
445X0	E	66.94%	18.25%	6.01%	2.32%	4.91%	1.57%
445X1	M	85.19%	4.21%	4.97%	0.12%	5.25%	0.26%
461X0	M	83.35%	7.83%	3.55%	0.19%	4.63%	0.44%
462X0	M	88.25%	2.85%	3.76%	0.07%	4.91%	0.16%
463X0	M	83.35%	7.83%	3.55%	0.19%	4.63%	0.44%
464X0	M	83.88%	8.02%	3.10%	0.20%	4.36%	0.44%
472X0	M	77.46%	12.15%	4.52%	0.35%	4.77%	0.75%
472X1	M	73.82%	14.80%	4.87%	0.51%	4.88%	1.13%
472X2	M	77.46%	12.15%	4.52%	0.35%	4.77%	0.75%
472X3	M	80.51%	9.44%	4.19%	0.21%	4.85%	0.81%
472X4	A	61.18%	25.57%	3.77%	3.07%	4.06%	2.35%
511X0	G	64.82%	20.56%	5.44%	2.66%	4.63%	1.89%
511X1	G	67.87%	20.30%	4.28%	1.89%	4.18%	1.47%
542X0	E	65.38%	19.75%	5.87%	2.51%	4.79%	1.70%
542X1	E	84.08%	1.82%	7.55%	0.23%	6.16%	0.16%
542X2	M	86.86%	3.54%	4.45%	0.08%	4.85%	0.22%
545X0	E	84.09%	1.81%	7.55%	0.23%	6.16%	0.16%
545X1	M	77.46%	12.15%	4.52%	0.35%	4.77%	0.75%
545X2	E	84.09%	1.81%	7.55%	0.23%	6.16%	0.16%
545X3	E	65.38%	19.75%	5.87%	2.51%	4.79%	1.70%
551X0	M	73.83%	14.79%	4.87%	0.51%	4.88%	1.12%
551X1	M	73.83%	14.79%	4.87%	0.51%	4.88%	1.12%
552X0	M	84.84%	4.57%	4.95%	0.13%	5.22%	0.28%
552X1	M	82.75%	5.70%	5.46%	0.20%	5.47%	0.43%
552X2	M	73.83%	14.79%	4.87%	0.51%	4.88%	1.12%
552X4	M	73.95%	14.67%	4.88%	0.51%	4.88%	1.12%
552X5	M	77.57%	12.04%	4.53%	0.35%	4.78%	0.74%
553X0	G	66.76%	20.44%	4.61%	2.09%	4.44%	1.66%
554X0	A	61.38%	25.39%	3.78%	3.05%	4.07%	2.33%
555X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
566X0	G	64.82%	20.56%	5.44%	2.66%	4.63%	1.89%
566X1	M	82.81%	5.64%	5.46%	0.20%	5.47%	0.43%
571X0	G	84.52%	1.92%	7.10%	0.25%	6.03%	0.18%
591X0	M	73.82%	14.80%	4.87%	0.51%	4.88%	1.13%
591X1	M	73.82%	14.80%	4.87%	0.51%	4.88%	1.13%
602X0	A	61.71%	24.41%	4.14%	3.16%	4.26%	2.32%

Source: Profile of American Youth, 1980.

SIMULATED WITHIN AFSC BY CATEGORY DISTRIBUTION

AFSC	TYPE	WM	WF	BM	BF	HM	HF
304X4	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
304X5	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
304X6	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
305X4	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
306X0	E	76.49%	14.38%	3.07%	0.71%	4.58%	0.77%
306X1	E	74.96%	15.22%	3.44%	0.87%	4.64%	0.88%
306X2	E	76.49%	14.38%	3.07%	0.71%	4.58%	0.77%
307X0	E	76.49%	14.38%	3.07%	0.71%	4.58%	0.77%
309X0	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
316X0	E	77.68%	13.19%	3.12%	0.65%	4.66%	0.71%
316X1	E	89.67%	1.23%	3.60%	0.06%	5.37%	0.07%
316X2	E	85.32%	5.57%	3.42%	0.27%	5.11%	0.30%
316X3	E	76.49%	14.38%	3.07%	0.71%	4.58%	0.77%
321X0	E	85.32%	5.57%	3.42%	0.27%	5.11%	0.30%
321X1	E	85.32%	5.57%	3.42%	0.27%	5.11%	0.30%
321X2	E	76.35%	14.52%	3.06%	0.71%	4.58%	0.78%
322X2	E	78.13%	13.53%	2.90%	0.42%	4.35%	0.67%
323X1	E	85.32%	5.57%	3.42%	0.27%	5.11%	0.30%
323X2	E	76.36%	14.51%	3.07%	0.71%	4.58%	0.78%
323X3	E	85.32%	5.57%	3.42%	0.27%	5.11%	0.30%
324X0	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
325X0	E	76.73%	14.14%	3.08%	0.69%	4.60%	0.76%
325X1	E	76.73%	14.14%	3.08%	0.69%	4.60%	0.76%
326X0	E	79.41%	12.90%	2.17%	0.42%	4.46%	0.64%
326X3	E	76.92%	13.94%	3.09%	0.68%	4.61%	0.75%
326X4	E	76.92%	13.94%	3.09%	0.68%	4.61%	0.75%
326X5	E	76.92%	13.94%	3.09%	0.68%	4.61%	0.75%
326X6	E	85.32%	5.57%	3.42%	0.27%	5.11%	0.30%
326X7	E	85.32%	5.57%	3.42%	0.27%	5.11%	0.30%
326X8	E	84.29%	5.95%	3.87%	0.34%	5.22%	0.34%
328X0	E	76.35%	14.52%	3.06%	0.71%	4.58%	0.78%
328X1	E	76.35%	14.52%	3.06%	0.71%	4.58%	0.78%
328X2	E	76.35%	14.52%	3.06%	0.71%	4.58%	0.78%
328X3	E	89.67%	1.23%	3.60%	0.06%	5.37%	0.07%
328X4	E	85.32%	5.57%	3.42%	0.27%	5.11%	0.30%
328X5	E	77.06%	13.81%	3.09%	0.68%	4.62%	0.74%
341X1	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
341X2	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
341X4	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
341X6	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
341X7	E	76.49%	14.38%	3.07%	0.71%	4.58%	0.77%
361X0	M	88.32%	1.00%	5.15%	0.03%	5.44%	0.06%
361X1	M	84.88%	4.53%	4.95%	0.13%	5.23%	0.28%
362X1	E	69.28%	17.61%	5.24%	1.89%	4.48%	1.50%
362X3	E	69.30%	17.59%	5.24%	1.89%	4.48%	1.50%
362X4	E	80.53%	6.85%	6.09%	0.74%	5.21%	0.58%
391X0	G	66.76%	20.44%	4.61%	2.09%	4.44%	1.66%
392X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
404X0	E	66.75%	19.03%	5.81%	2.19%	4.56%	1.66%
404X1	E	69.29%	17.59%	5.24%	1.89%	4.48%	1.50%
423X0	E	79.20%	7.48%	6.54%	0.82%	5.31%	0.64%
423X1	M	82.75%	5.70%	5.46%	0.20%	5.47%	0.43%
423X2	E	84.04%	1.85%	7.55%	0.24%	6.16%	0.16%
423X3	M	84.84%	4.57%	4.95%	0.13%	5.22%	0.28%

Source: Profile of American Youth, 1980.

SIMULATED WITHIN AFSC BY CATEGORY DISTRIBUTION

AFSC	TYPE	WM	WF	BM	BF	HM	HF
100X0	A	61.39%	25.38%	3.78%	3.05%	4.07%	2.33%
111X0	G	78.51%	8.17%	6.27%	0.93%	5.41%	0.70%
112X0	G	79.48%	8.23%	5.49%	0.84%	5.29%	0.67%
113X0	E	77.70%	7.94%	6.98%	1.01%	5.70%	0.68%
114X0	M	84.95%	4.46%	4.96%	0.13%	5.23%	0.28%
115X0	G	78.94%	7.76%	6.31%	0.88%	5.44%	0.67%
116X0	G	66.64%	19.53%	5.33%	2.23%	4.59%	1.68%
121X0	G	85.06%	1.90%	6.80%	0.22%	5.86%	0.16%
122X0	G	76.52%	8.35%	7.23%	1.21%	5.86%	0.83%
201X0	G	65.89%	20.25%	5.27%	2.31%	4.54%	1.74%
201X1	G	73.52%	18.54%	2.79%	0.91%	3.21%	1.03%
202X0	G	70.32%	19.79%	3.44%	1.29%	3.76%	1.40%
203X0	G	73.34%	18.71%	2.78%	0.92%	3.21%	1.04%
205X0	G	73.65%	18.41%	2.79%	0.90%	3.22%	1.02%
206X0	G	71.33%	19.20%	3.33%	1.16%	3.66%	1.32%
207X1	A	61.18%	25.57%	3.77%	3.07%	4.06%	2.35%
207X2	A	61.18%	25.57%	3.77%	3.07%	4.06%	2.35%
208X0	G	73.36%	18.70%	2.78%	0.92%	3.21%	1.04%
208X1	G	73.36%	18.70%	2.78%	0.92%	3.21%	1.04%
208X2	G	73.36%	18.70%	2.78%	0.92%	3.21%	1.04%
208X3	G	73.36%	18.70%	2.78%	0.92%	3.21%	1.04%
208X4	G	73.36%	18.70%	2.78%	0.92%	3.21%	1.04%
208X5	G	73.36%	18.70%	2.78%	0.92%	3.21%	1.04%
209X0	G	70.32%	19.79%	3.44%	1.29%	3.76%	1.40%
222X0	G	78.40%	8.28%	6.27%	0.94%	5.40%	0.71%
231X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
231X1	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
231X2	G	67.16%	19.04%	5.37%	2.17%	4.63%	1.64%
232X0	G	70.14%	19.97%	3.43%	1.31%	3.75%	1.41%
233X0	G	65.89%	20.25%	5.27%	2.31%	4.54%	1.74%
233X1	G	65.89%	20.25%	5.27%	2.31%	4.54%	1.74%
241X0	G	67.86%	20.32%	4.28%	1.89%	4.18%	1.48%
242X0	G	70.80%	19.32%	3.46%	1.26%	3.78%	1.37%
251X0	G	70.78%	19.35%	3.46%	1.27%	3.78%	1.37%
271X1	A	61.71%	24.41%	4.14%	3.16%	4.26%	2.32%
271X2	A	61.71%	24.41%	4.14%	3.16%	4.26%	2.32%
272X0	G	66.64%	19.53%	5.33%	2.23%	4.59%	1.68%
273X0	G	66.64%	19.53%	5.33%	2.23%	4.59%	1.68%
274X0	G	67.53%	19.70%	4.66%	2.02%	4.49%	1.60%
275X0	G	79.04%	8.66%	5.46%	0.89%	5.26%	0.70%
276X0	G	68.36%	18.90%	4.72%	1.93%	4.55%	1.54%
277X0	E	73.21%	16.25%	3.73%	1.24%	4.42%	1.15%
291X0	G	65.72%	20.42%	5.25%	2.33%	4.53%	1.76%
293X3	A	62.29%	24.54%	3.84%	2.95%	4.13%	2.26%
295X0	G	65.72%	20.42%	5.25%	2.33%	4.53%	1.76%
296X0	G	70.31%	19.80%	3.44%	1.30%	3.76%	1.40%
297X0	G	65.88%	20.26%	5.27%	2.31%	4.54%	1.74%
302X0	E	74.95%	15.22%	3.44%	0.87%	4.64%	0.88%
302X1	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
303X1	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
303X2	E	78.87%	13.44%	2.16%	0.44%	4.43%	0.67%
303X3	E	78.25%	13.40%	2.90%	0.42%	4.35%	0.67%
304X0	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%
304X1	E	76.48%	14.38%	3.07%	0.71%	4.58%	0.77%

Source: Profile of American Youth, 1980.

TABLE A-3

WITHIN AFSC SEX-RACIAL/ETHNIC DISTRIBUTION

This table presents the simulated within AFSC sex-racial/ethnic distributions for each AFSC. It is the results of equation 8) reprinted here as:

$$8) \quad \text{AFSDIST}_{kj} = \text{QMA}_{kj} / \sum_k \text{QMA}_{kj}.$$

For example, it is expected that 61.39% of the persons accessing into AFSC 100X0 will be white males and 25.38% white females, etc.

Combined Qualified and Willing Rates (QMA) by Category, by AFSC

AFSC	TYPE	WM	WF	BM	BF	HM	HF
913X1	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
914X0	G	3.82%	1.16%	1.44%	0.62%	3.12%	1.12%
914X1	G	4.14%	1.29%	1.72%	0.75%	3.65%	1.39%
915X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
918X0	E	3.11%	0.59%	0.75%	0.17%	2.47%	0.42%
919X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
924X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
924X1	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
925X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
926X0	G	4.50%	1.45%	2.16%	0.94%	4.11%	1.66%
981X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
982X0	G	3.81%	1.16%	1.44%	0.62%	3.11%	1.12%
995X0	G	4.69%	1.58%	2.65%	1.31%	4.75%	2.08%
995X1	G	4.98%	1.70%	2.82%	1.42%	5.05%	2.25%
995X2	G	4.11%	1.28%	1.70%	0.75%	3.62%	1.38%
995X3	G	3.63%	1.13%	2.06%	0.94%	3.68%	1.49%
995X4	M	4.60%	0.91%	1.82%	0.18%	4.03%	0.92%
995X5	G	4.02%	0.10%	2.28%	0.08%	4.07%	0.13%
995X6	E	4.45%	1.13%	2.02%	0.69%	3.81%	1.28%
996X0	G	4.11%	1.28%	1.70%	0.75%	3.62%	1.38%
996X1	G	4.86%	1.59%	2.75%	1.32%	4.93%	2.10%
996X2	G	4.86%	1.59%	2.75%	1.32%	4.93%	2.10%
996X3	A	4.50%	1.67%	2.47%	1.36%	4.66%	2.22%
996X4	A	4.01%	0.52%	2.02%	0.41%	3.91%	0.69%
996X5	G	4.85%	1.61%	2.75%	1.34%	4.92%	2.13%
996X7	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
996X8	G	4.78%	1.59%	2.71%	1.32%	4.85%	2.10%
997X1	A	4.24%	1.62%	2.14%	1.28%	4.14%	2.15%
997X2	G	4.86%	1.62%	2.64%	1.23%	4.78%	2.05%

Combined Qualified and Willing Rates (QMA) by Category, by AFSC

AFSC	TYPE	WM	WF	BM	BF	HM	HF
602X1	A	3.64%	1.51%	1.47%	1.12%	3.33%	1.91%
602X2	G	4.84%	1.68%	2.74%	1.40%	4.91%	2.22%
603X0	M	4.58%	0.96%	1.81%	0.19%	4.01%	0.97%
605X0	A	4.09%	1.59%	2.06%	1.25%	3.99%	2.12%
605X1	G	4.84%	1.67%	2.74%	1.39%	4.91%	2.21%
611X0	A	4.50%	1.67%	2.47%	1.36%	4.66%	2.22%
612X0	G	4.90%	0.58%	2.78%	0.48%	4.97%	0.76%
612X1	A	4.50%	1.67%	2.47%	1.36%	4.66%	2.22%
622X0	G	4.98%	1.70%	2.82%	1.42%	5.05%	2.25%
631X0	G	4.04%	0.24%	1.29%	0.04%	3.15%	0.20%
645X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
645X1	G	4.96%	1.70%	2.81%	1.42%	5.03%	2.25%
645X2	A	2.76%	1.28%	0.94%	0.83%	2.14%	1.44%
651X0	A	2.41%	1.15%	0.86%	0.66%	1.77%	1.30%
661X0	A	2.00%	1.05%	0.60%	0.48%	1.49%	1.01%
672X1	A	2.00%	1.05%	0.60%	0.48%	1.49%	1.01%
672X2	A	1.61%	0.90%	0.46%	0.34%	1.25%	0.87%
673X0	A	1.61%	0.90%	0.46%	0.34%	1.25%	0.87%
701X0	A	3.45%	1.31%	1.16%	0.71%	3.09%	1.43%
702X0	A	4.21%	1.62%	2.12%	1.28%	4.11%	2.15%
703X0	G	4.84%	1.68%	2.74%	1.40%	4.91%	2.22%
705X0	A	3.26%	1.41%	1.20%	0.97%	2.86%	1.72%
732X0	A	3.26%	1.41%	1.20%	0.97%	2.86%	1.72%
732X1	A	3.26%	1.41%	1.20%	0.97%	2.86%	1.72%
732X4	A	2.77%	1.28%	0.94%	0.84%	2.15%	1.44%
733X1	G	3.07%	0.87%	0.86%	0.30%	2.09%	0.79%
734X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
741X1	A	4.50%	1.67%	2.47%	1.36%	4.66%	2.22%
742X0	A	1.96%	0.96%	0.53%	0.36%	1.41%	0.90%
751X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
751X2	G	4.24%	1.36%	1.76%	0.80%	3.74%	1.47%
751X3	G	3.07%	0.87%	0.86%	0.30%	2.09%	0.79%
753X0	G	3.30%	0.96%	1.58%	0.63%	3.02%	1.10%
753X1	M	4.09%	0.40%	1.05%	0.06%	3.01%	0.30%
791X0	G	2.64%	0.70%	0.60%	0.20%	1.53%	0.51%
791X1	G	2.64%	0.70%	0.60%	0.20%	1.53%	0.51%
791X2	G	2.64%	0.70%	0.60%	0.20%	1.53%	0.51%
811X0	G	4.66%	0.54%	2.64%	0.45%	4.73%	0.71%
811X2	G	4.67%	0.52%	2.54%	0.39%	4.59%	0.66%
821X0	G	4.32%	0.46%	2.07%	0.30%	3.95%	0.53%
871X0	A	4.92%	1.69%	2.79%	1.41%	4.99%	2.23%
872X0	A	4.92%	1.69%	2.79%	1.41%	4.99%	2.23%
902X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
902X1	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
902X2	G	4.49%	1.44%	2.15%	0.94%	4.10%	1.65%
903X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
903X1	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
905X0	G	4.39%	1.37%	2.11%	0.89%	4.01%	1.57%
906X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
907X0	G	4.24%	1.36%	1.76%	0.80%	3.74%	1.47%
908X0	G	4.50%	1.45%	2.16%	0.95%	4.11%	1.66%
911X0	G	4.49%	1.45%	2.15%	0.94%	4.10%	1.66%
912X5	G	3.91%	1.22%	1.48%	0.65%	3.19%	1.18%
913X0	G	4.10%	1.28%	1.70%	0.75%	3.61%	1.38%

Based Upon Model Results.

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TABLE A-5

AFS-SPECIFIC MENTAL QUALIFICATION RATES

This table presents values for $QMAGE_{kj}$ as defined in Section 2.1. p. 8.

AFS-SPECIFIC MENTAL QUALIFICATION RATES

SEX-RACIAL ETHNIC CATEGORIES

AFSC	TYPE	WM	WF	BM	BF	HM	HF
100X0	A	0.6551	0.8275	0.4273	0.6832	0.5676	0.7660
111X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
112X0	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
113X0	E	0.9836	0.9074	0.9352	0.7916	0.9422	0.7873
114X0	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
115X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
116X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
121X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
122X0	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
201X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
201X1	G	0.5311	0.4094	0.2131	0.1382	0.3034	0.2287
202X0	G	0.6860	0.5901	0.3551	0.2654	0.4788	0.4203
203X0	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
205X0	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
206X0	G	0.6174	0.5079	0.3053	0.2107	0.4144	0.3526
207X1	A	0.6551	0.8275	0.4273	0.6832	0.5676	0.7660
207X2	A	0.6551	0.8275	0.4273	0.6832	0.5676	0.7660
208X0	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
208X1	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
208X2	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
208X3	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
208X4	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
208X5	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
209X0	G	0.6860	0.5901	0.3551	0.2654	0.4788	0.4203
222X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
231X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
231X1	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
231X2	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
232X0	G	0.6860	0.5901	0.3551	0.2654	0.4788	0.4203
233X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
233X1	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
241X0	G	0.7860	0.7183	0.5246	0.4589	0.6329	0.5249
242X0	G	0.6860	0.5901	0.3551	0.2654	0.4788	0.4203
251X0	G	0.6860	0.5901	0.3551	0.2654	0.4788	0.4203
271X1	A	0.7322	0.8849	0.5199	0.7872	0.6604	0.8460
271X2	A	0.7322	0.8849	0.5199	0.7872	0.6604	0.8460
272X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
273X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
274X0	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
275X0	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
276X0	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
277X0	E	0.7793	0.5285	0.4207	0.2771	0.6142	0.3757
291X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
293X3	A	0.6551	0.8275	0.4273	0.6832	0.5676	0.7660
295X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
296X0	G	0.6860	0.5901	0.3551	0.2654	0.4788	0.4203
297X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
302X0	E	0.7079	0.4393	0.3440	0.1734	0.5724	0.2550
302X1	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
303X1	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
303X2	E	0.4530	0.2333	0.1313	0.0521	0.3322	0.1169
303X3	E	0.5555	0.2907	0.2181	0.0627	0.4038	0.1458

AFS-SPECIFIC MENTAL QUALIFICATION RATES

SEX-RACIAL ETHNIC CATEGORIES

AFSC	TYPE	WM	WF	BM	BF	HM	HF
304X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
304X1	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
304X4	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
304X5	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
304X6	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
305X4	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
306X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
306X1	E	0.7079	0.4393	0.3440	0.1734	0.5724	0.2550
306X2	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
307X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
309X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
316X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
316X1	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
316X2	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
316X3	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
321X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
321X1	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
321X2	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
322X2	E	0.5555	0.2907	0.2181	0.0627	0.4038	0.1458
323X1	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
323X2	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
323X3	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
324X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
325X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
325X1	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
326X0	E	0.4530	0.2333	0.1313	0.0521	0.3322	0.1169
326X3	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
326X4	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
326X5	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
326X6	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
326X7	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
326X8	E	0.7079	0.4393	0.3440	0.1734	0.5724	0.2550
328X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
328X1	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
328X2	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
328X3	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
328X4	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
328X5	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
341X1	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
341X2	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
341X4	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
341X6	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
341X7	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
361X0	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
361X1	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
362X1	E	0.9143	0.7099	0.7318	0.5236	0.7730	0.6095
362X3	E	0.9143	0.7092	0.7318	0.5236	0.7730	0.6095
362X4	E	0.9143	0.7092	0.7318	0.5236	0.7730	0.6095
391X0	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
392X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
404X0	E	0.9579	0.8345	0.8826	0.6616	0.8542	0.7317
404X1	E	0.9143	0.7092	0.7318	0.5236	0.7730	0.6095

Source: Profile of American Youth, 1980.

AFS-SPECIFIC MENTAL QUALIFICATION RATES

SEX-RACIAL ETHNIC CATEGORIES

AFSC	TYPE	WM	WF	BM	BF	HM	HF
423X0	E	0.9353	0.7771	0.8183	0.5829	0.8199	0.6702
423X1	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
423X2	E	0.9836	0.9074	0.9352	0.7916	0.9422	0.7873
423X3	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
423X4	E	0.9579	0.8345	0.8826	0.6616	0.8542	0.7317
423X5	M	0.90663	0.42686	0.56628	0.08602	0.69565	0.26989
426X1	M	0.8863	0.3140	0.4887	0.0470	0.6971	0.2699
426X2	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
426X3	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
426X4	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
427X0	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
427X1	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
427X2	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
427X3	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
427X4	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
427X5	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
431X0	M	0.8863	0.3140	0.4887	0.0470	0.6971	0.2699
431X1	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
431X2	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
431X3	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
431X4	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
443X0	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
445X0	E	0.9836	0.9074	0.9352	0.7916	0.9422	0.7873
445X1	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
461X0	M	0.8477	0.2409	0.3824	0.0399	0.6159	0.1374
462X0	M	0.8477	0.2409	0.3824	0.0399	0.6159	0.1374
463X0	M	0.8477	0.2409	0.3824	0.0399	0.6159	0.1374
464X0	M	0.8093	0.2341	0.3166	0.0399	0.5494	0.1281
472X0	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
472X1	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
472X2	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
472X3	M	0.8863	0.3140	0.4887	0.0470	0.6971	0.2699
472X4	A	0.6551	0.8275	0.4273	0.6832	0.5676	0.7660
511X0	G	0.9472	0.9178	0.8425	0.8157	0.8834	0.8500
511X1	G	0.7860	0.7183	0.5246	0.4589	0.6329	0.5249
542X0	E	0.9836	0.9074	0.9352	0.7916	0.9422	0.7873
542X1	E	0.9836	0.9074	0.9352	0.7916	0.9422	0.7873
542X2	M	0.8557	0.3069	0.4638	0.0470	0.6246	0.1927
545X0	E	0.9836	0.9074	0.9352	0.7916	0.9422	0.7873
545X1	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
545X2	E	0.9836	0.9074	0.9352	0.7916	0.9422	0.7873
545X3	E	0.9836	0.9074	0.9352	0.7916	0.9422	0.7873
551X0	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
551X1	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
552X0	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
552X1	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
552X2	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
552X4	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
552X5	M	0.9166	0.4346	0.5663	0.0860	0.7375	0.2699
553X0	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
554X0	A	0.6551	0.8275	0.4273	0.6832	0.5676	0.7660
555X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360

AFS-SPECIFIC MENTAL QUALIFICATION RATES

SEX-RACIAL ETHNIC CATEGORIES

AFSC	TYPE	WM	WF	BM	BF	HM	HF
566X0	G	0.9472	0.9178	0.8425	0.8157	0.8834	0.8500
566X1	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
571X0	G	0.9472	0.9178	0.8425	0.8157	0.8834	0.8500
591X0	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
591X1	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
602X0	A	0.7322	0.8849	0.5199	0.7872	0.6604	0.8460
602X1	A	0.7322	0.8849	0.5199	0.7872	0.6604	0.8460
602X2	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
603X0	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
605X0	A	0.8462	0.9519	0.7526	0.8993	0.8143	0.9567
605X1	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
611X0	A	0.9044	0.9816	0.8762	0.9597	0.9230	0.9864
612X0	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
612X1	A	0.9044	0.9816	0.8762	0.9597	0.9230	0.9864
622X0	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
631X0	G	0.8753	0.4233	0.4935	0.0772	0.6728	0.2699
645X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
645X1	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
645X2	A	0.5567	0.7523	0.3336	0.5891	0.4254	0.6413
651X0	A	0.4836	0.6772	0.3049	0.4647	0.3505	0.5787
661X0	A	0.4020	0.6193	0.2138	0.3400	0.2953	0.4488
672X1	A	0.4020	0.6193	0.2138	0.3400	0.2953	0.4488
672X2	A	0.3244	0.5262	0.1637	0.2391	0.2474	0.3869
673X0	A	0.3244	0.5262	0.1637	0.2391	0.2474	0.3869
701X0	A	0.6929	0.7676	0.4131	0.5002	0.6122	0.6343
702X0	A	0.8462	0.9519	0.7526	0.8993	0.8143	0.9567
703X0	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
705X0	A	0.6551	0.8275	0.4273	0.6832	0.5676	0.7660
732X0	A	0.6551	0.8275	0.4273	0.6832	0.5676	0.7660
732X1	A	0.6551	0.8275	0.4273	0.6832	0.5676	0.7660
732X4	A	0.5567	0.7523	0.3336	0.5891	0.4254	0.6413
733X1	G	0.6174	0.5079	0.3053	0.2107	0.4144	0.3526
734X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
741X1	A	0.9044	0.9816	0.8762	0.9597	0.9230	0.9864
742X0	A	0.3938	0.5654	0.1879	0.2531	0.2788	0.3999
751X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
751X2	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
751X3	G	0.6174	0.5079	0.3053	0.2107	0.4144	0.3526
753X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
753X1	M	0.8477	0.2409	0.3824	0.0399	0.6159	0.1374
791X0	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
791X1	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
791X2	G	0.5311	0.4095	0.2131	0.1382	0.3034	0.2287
811X0	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
811X2	G	0.9768	0.9531	0.9376	0.8657	0.9477	0.9106
821X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
871X0	A	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
872X0	A	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
902X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
902X1	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
902X2	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
903X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360

Source: Profile of American Youth, 1980. A-29

AFS-SPECIFIC MENTAL QUALIFICATION RATES

SEX-RACIAL ETHNIC CATEGORIES

AFSC	TYPE	WM	WF	BM	BF	HM	HF
903X1	G	0.9050	0.8501	0.7659	0.6665	0.8146	0.7360
905X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
906X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
907X0	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
908X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
911X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
912X5	G	0.7860	0.7183	0.5246	0.4589	0.6329	0.5249
913X0	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
913X1	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
914X0	G	0.7860	0.7183	0.5246	0.4589	0.6329	0.5249
914X1	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
915X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
918X0	E	0.6392	0.3672	0.2717	0.1239	0.5005	0.1987
919X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
924X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
924X1	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
925X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
926X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
981X0	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
982X0	G	0.7860	0.7183	0.5246	0.4589	0.6329	0.5249
995X0	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
995X1	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
995X2	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
995X3	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
995X4	M	0.9466	0.5733	0.6608	0.1367	0.8170	0.4387
995X5	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
995X6	E	0.9143	0.7092	0.7318	0.5236	0.7730	0.6095
996X0	G	0.8528	0.7976	0.6236	0.5610	0.7416	0.6520
996X1	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
996X2	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
996X3	A	0.9044	0.9816	0.8762	0.9597	0.9230	0.9864
996X4	A	0.8462	0.9519	0.7526	0.8993	0.8143	0.9567
996X5	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
996X7	G	0.9050	0.8501	0.7659	0.6665	0.8149	0.7360
996X8	G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
997X1	A	0.8462	0.9519	0.7526	0.8993	0.8143	0.9567
997X2	G	0.9768	0.9531	0.9376	0.8657	0.9477	0.9106

Source: Defense Manpower Data Center, 1984.

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TABLE A-6

COMBINED MEDICAL/MORAL/ADMINISTRATIVE QUALIFICATION RATES

This table displays the joint product of medical and moral/administrative qualification rates as defined in Section 2.1. p. 8.

$MORAD_k = 95.2\%$ for males, 98.4% for females.

$MEDICAL_k = 73.1\%$ for males, 64.3% for females.

COMBINED MEDICAL/MORAL/ADMINISTRATIVE QUALIFICATION RATES

AFSC	Type	Male	Female	Average
100X0	A	0.6959	0.6307	0.6633
111X0	G	0.6518	0.1999	0.4259
112X0	G	0.6518	0.1999	0.4259
113X0	E	0.6518	0.1999	0.4259
114X0	M	0.6518	0.1999	0.4259
115X0	G	0.5007	0.1450	0.3228
116X0	G	0.6802	0.5875	0.6339
121X0	G	0.5385	0.0355	0.2870
122X0	G	0.6697	0.2024	0.4361
201X0	G	0.6942	0.6289	0.6615
201X1	G	0.6942	0.6289	0.6615
202X0	G	0.6923	0.6272	0.6597
203X0	G	0.6751	0.6185	0.6468
205X0	G	0.6757	0.6065	0.6411
206X0	G	0.6942	0.6289	0.6615
207X1	A	0.6751	0.6185	0.6468
207X2	A	0.6751	0.6185	0.6468
208X0	G	0.6751	0.6181	0.6466
208X1	G	0.6751	0.6181	0.6466
208X2	G	0.6751	0.6181	0.6466
208X3	G	0.6751	0.6181	0.6466
208X4	G	0.6751	0.6181	0.6466
208X5	G	0.6751	0.6181	0.6466
209X0	G	0.6923	0.6272	0.6597
222X0	G	0.6852	0.2132	0.4492
231X0	G	0.6959	0.6307	0.6633
231X1	G	0.6959	0.6307	0.6633
231X2	G	0.5384	0.4499	0.4941
232X0	G	0.6773	0.6207	0.6490
233X0	G	0.6942	0.6289	0.6615
233X1	G	0.6942	0.6289	0.6615
241X0	G	0.6908	0.6267	0.6587
242X0	G	0.6788	0.5963	0.6375
251X0	G	0.6757	0.5946	0.6352
271X1	A	0.6959	0.6307	0.6633
271X2	A	0.6959	0.6307	0.6633
272X0	G	0.6802	0.5875	0.6339
273X0	G	0.6802	0.5875	0.6339
274X0	G	0.6802	0.5875	0.6339
275X0	G	0.6456	0.2093	0.4274
276X0	G	0.5130	0.4199	0.4665
277X0	E	0.6959	0.6307	0.6633
291X0	G	0.6757	0.6188	0.6473
293X3	A	0.6802	0.5875	0.6339
295X0	G	0.6757	0.6188	0.6473
296X0	G	0.6959	0.6307	0.6633
297X0	G	0.6959	0.6307	0.6633
302X0	E	0.6959	0.6307	0.6633
302X1	E	0.6959	0.6307	0.6633
303X1	E	0.6959	0.6307	0.6633
303X2	E	0.6773	0.6207	0.6490
303X3	E	0.6959	0.6307	0.6633
304X0	E	0.6959	0.6307	0.6633
304X1	E	0.6959	0.6307	0.6633

ESTIMATED FOR AIR FORCE ACCESSIONS

COMBINED MEDICAL/MORAL/ADMINISTRATIVE QUALIFICATION RATES

AFSC	Type	Male	Female	Average
304X4	E	0.6959	0.6307	0.6633
304X5	E	0.6959	0.6307	0.6633
304X6	E	0.6959	0.6307	0.6633
305X4	E	0.6959	0.6307	0.6633
306X0	E	0.6942	0.6289	0.6615
306X1	E	0.6942	0.6289	0.6615
306X2	E	0.6942	0.6289	0.6615
307X0	E	0.6942	0.6289	0.6615
309X0	E	0.6959	0.6307	0.6633
316X0	E	0.5130	0.4199	0.4665
316X1	E	0.5548	0.0368	0.2958
316X2	E	0.6654	0.2094	0.4374
316X3	E	0.6942	0.6289	0.6615
321X0	E	0.6654	0.2094	0.4374
321X1	E	0.6654	0.2094	0.4374
321X2	E	0.6773	0.6207	0.6490
322X2	E	0.6773	0.6207	0.6490
323X1	E	0.6654	0.2094	0.4374
323X2	E	0.6757	0.6188	0.6473
323X3	E	0.6654	0.2094	0.4374
324X0	E	0.6959	0.6307	0.6633
325X0	E	0.6665	0.5918	0.6291
325X1	E	0.6665	0.5918	0.6291
326X0	E	0.6773	0.5918	0.6346
326X3	E	0.6773	0.5918	0.6346
326X4	E	0.6773	0.5918	0.6346
326X5	E	0.6773	0.5918	0.6346
326X6	E	0.6670	0.2100	0.4385
326X7	E	0.6670	0.2100	0.4385
326X8	E	0.6670	0.2100	0.4385
328X0	E	0.6773	0.6207	0.6490
328X1	E	0.6773	0.6207	0.6490
328X2	E	0.6773	0.6207	0.6490
328X3	E	0.5562	0.0368	0.2965
328X4	E	0.6670	0.2100	0.4385
328X5	E	0.6802	0.5875	0.6339
341X1	E	0.6959	0.6307	0.6633
341X2	E	0.6959	0.6307	0.6633
341X4	E	0.6959	0.6307	0.6633
341X6	E	0.6959	0.6307	0.6633
341X7	E	0.6942	0.6289	0.6615
361X0	M	0.5385	0.0355	0.2870
361X1	M	0.6780	0.2115	0.4447
362X1	E	0.6959	0.6307	0.6633
362X3	E	0.6942	0.6289	0.6615
362X4	E	0.6619	0.2009	0.4314
391X0	G	0.6959	0.6307	0.6633
392X0	G	0.6959	0.6307	0.6633
404X0	E	0.6959	0.6307	0.6633
404X1	E	0.6959	0.6307	0.6633
423X0	E	0.6670	0.2100	0.4385
423X1	M	0.6670	0.2100	0.4385
423X2	E	0.5562	0.0368	0.2965
423X3	M	0.6670	0.2100	0.4385

ESTIMATED FOR AIR FORCE ACCESSIONS

COMBINED MEDICAL/MORAL/ADMINISTRATIVE QUALIFICATION RATES

AFSC	Type	Male	Female	Average
423X4	E	0.6670	0.2100	0.4385
423X5	E	0.6670	0.2100	0.4385
426X1	M	0.6773	0.6207	0.6490
426X2	M	0.6670	0.2100	0.4385
426X3	M	0.6773	0.6207	0.6490
426X4	M	0.6670	0.2100	0.4385
427X0	M	0.6773	0.6207	0.6490
427X1	M	0.6773	0.6207	0.6490
427X2	G	0.6773	0.6207	0.6490
427X3	M	0.6773	0.6207	0.6490
427X4	M	0.6773	0.6207	0.6490
427X5	M	0.6773	0.6207	0.6490
431X0	M	0.5562	0.0368	0.2965
431X1	M	0.6670	0.2100	0.4385
431X2	M	0.6670	0.2100	0.4385
431X3	M	0.6670	0.2100	0.4385
431X4	M	0.6670	0.2100	0.4385
443X0	M	0.4234	0.0298	0.2266
445X0	E	0.5130	0.4199	0.4665
445X1	M	0.5008	0.1446	0.3227
461X0	M	0.6757	0.6188	0.6473
462X0	M	0.6654	0.2094	0.4374
463X0	M	0.6757	0.6188	0.6473
464X0	M	0.6757	0.6188	0.6473
472X0	M	0.6773	0.6207	0.6490
472X1	M	0.6773	0.6207	0.6490
472X2	M	0.6773	0.6207	0.6490
472X3	M	0.6773	0.6207	0.6490
472X4	A	0.6773	0.6207	0.6490
511X0	G	0.6959	0.6307	0.6633
511X1	G	0.6959	0.6307	0.6633
542X0	E	0.6940	0.6292	0.6616
542X1	E	0.5521	0.0358	0.2939
542X2	M	0.6663	0.2097	0.4380
545X0	E	0.5557	0.0359	0.2958
545X1	M	0.6773	0.6207	0.6490
545X2	E	0.5557	0.0359	0.2958
545X3	E	0.6940	0.6292	0.6616
551X0	M	0.6767	0.6198	0.6483
551X1	M	0.6767	0.6198	0.6483
552X0	M	0.6663	0.2097	0.4380
552X1	M	0.6663	0.2097	0.4380
552X2	M	0.6767	0.6198	0.6483
552X4	M	0.6940	0.6292	0.6616
552X5	M	0.6940	0.6292	0.6616
553X0	G	0.6940	0.6292	0.6616
554X0	A	0.6940	0.6292	0.6616
555X0	G	0.6940	0.6292	0.6616
566X0	G	0.6940	0.6292	0.6616
566X1	M	0.6833	0.2127	0.4480
571X0	G	0.5521	0.0358	0.2939
591X0	M	0.6773	0.6207	0.6490
591X1	M	0.6773	0.6207	0.6490
602X0	A	0.6959	0.6307	0.6633

ESTIMATED FOR AIR FORCE ACCESSIONS

COMBINED MEDICAL/MORAL/ADMINISTRATIVE QUALIFICATION RATES

AFSC	Type	Male	Female	Average
602X1	A	0.6959	0.6307	0.6633
602X2	G	0.6773	0.6207	0.6490
603X0	M	0.6767	0.6198	0.6483
605X0	A	0.6767	0.6198	0.6483
605X1	G	0.6767	0.6198	0.6483
611X0	A	0.6959	0.6307	0.6633
612X0	G	0.6852	0.2132	0.4492
612X1	A	0.6959	0.6307	0.6633
622X0	G	0.6959	0.6307	0.6633
631X0	G	0.6456	0.2123	0.4289
645X0	G	0.6959	0.6307	0.6633
645X1	G	0.6940	0.6292	0.6616
645X2	A	0.6940	0.6292	0.6616
651X0	A	0.6959	0.6307	0.6633
661X0	A	0.6959	0.6307	0.6633
672X1	A	0.6959	0.6307	0.6633
672X2	A	0.6959	0.6307	0.6633
673X0	A	0.6959	0.6307	0.6633
701X0	A	0.6959	0.6307	0.6633
702X0	A	0.6959	0.6307	0.6633
703X0	G	0.6773	0.6207	0.6490
705X0	A	0.6959	0.6307	0.6633
732X0	A	0.6959	0.6307	0.6633
732X1	A	0.6959	0.6307	0.6633
732X4	A	0.6959	0.6307	0.6633
733X1	G	0.6959	0.6307	0.6633
734X0	G	0.6959	0.6307	0.6633
741X1	A	0.6959	0.6307	0.6633
742X0	A	0.6959	0.6307	0.6633
751X0	G	0.6959	0.6307	0.6633
751X2	G	0.6959	0.6307	0.6633
751X3	G	0.6959	0.6307	0.6633
753X0	G	0.5104	0.4186	0.4645
753X1	M	0.6751	0.6181	0.6466
791X0	G	0.6959	0.6307	0.6633
791X1	G	0.6959	0.6307	0.6633
791X2	G	0.6959	0.6307	0.6633
811X0	G	0.6518	0.1994	0.4256
811X2	G	0.6684	0.2021	0.4353
821X0	G	0.6684	0.2021	0.4353
871X0	A	0.6879	0.6250	0.6565
872X0	A	0.6879	0.6250	0.6565
902X0	G	0.6959	0.6307	0.6633
902X1	G	0.6959	0.6307	0.6633
902X2	G	0.6941	0.6293	0.6617
903X0	G	0.6959	0.6307	0.6633
903X1	G	0.6959	0.6307	0.6633
905X0	G	0.6788	0.5963	0.6375
906X0	G	0.6959	0.6307	0.6633
907X0	G	0.6959	0.6307	0.6633
908X0	G	0.6959	0.6307	0.6633
911X0	G	0.6946	0.6300	0.6623
912X5	G	0.6952	0.6300	0.6626
913X0	G	0.6722	0.5925	0.6323

ESTIMATED FOR AIR FORCE ACCESSIONS

COMBINED MEDICAL/MORAL/ADMINISTRATIVE QUALIFICATION RATES

FSC	Type	Male	Female	Average
13X1	G	0.6959	0.6307	0.6633
14X0	G	0.6794	0.5971	0.6383
14X1	G	0.6794	0.5971	0.6383
15X0	G	0.6959	0.6307	0.6633
18X0	E	0.6794	0.5971	0.6383
19X0	G	0.6959	0.6307	0.6633
24X0	G	0.6959	0.6307	0.6633
24X1	G	0.6959	0.6307	0.6633
25X0	G	0.6959	0.6307	0.6633
26X0	G	0.6952	0.6302	0.6627
31X0	G	0.6959	0.6307	0.6633
32X0	G	0.6772	0.5962	0.6367
95X0	G	0.6555	0.5838	0.6197
95X1	G	0.6959	0.6307	0.6633
95X2	G	0.6738	0.5927	0.6332
95X3	G	0.5082	0.4172	0.4627
95X4	M	0.6802	0.5875	0.6339
95X5	G	0.5619	0.0359	0.2989
95X6	E	0.6802	0.5875	0.6339
96X0	G	0.6738	0.5927	0.6332
96X1	G	0.6802	0.5875	0.6339
96X2	G	0.6802	0.5875	0.6339
96X3	A	0.6959	0.6307	0.6633
96X4	A	0.6619	0.2009	0.4314
96X5	G	0.6788	0.5963	0.6375
96X7	G	0.6959	0.6307	0.6633
96X8	G	0.6690	0.5875	0.6283
97X1	A	0.7010	0.6307	0.6659
97X2	G	0.6959	0.6307	0.6633

TABLE A-7

AFSC WEIGHTS

This table contains the values of w_j as defined in Section 2.1. p. 10. They derived using Air Force provided estimates of FY 85 NPS accession rements by AFS.

AFSC WEIGHTS

AFSC	Type	Accession Requirement	Percent of Total
00X0	A	0	0.0000%
11X0	G	0	0.0000%
12X0	G	0	0.0000%
13X0	E	41	0.0631%
14X0	M	132	0.2032%
15X0	G	0	0.0000%
16X0	G	60	0.0924%
21X0	G	85	0.1309%
22X0	G	628	0.9669%
31X0	G	154	0.2371%
31X1	G	22	0.0339%
32X0	G	216	0.3326%
33X0	G	0	0.0000%
35X0	G	90	0.1386%
36X0	G	63	0.0970%
37X1	A	440	0.6774%
37X2	A	96	0.1478%
38X0	G	95	0.1463%
38X1	G	95	0.1463%
38X2	G	95	0.1463%
38X3	G	95	0.1463%
38X4	G	95	0.1463%
38X5	G	95	0.1463%
39X0	G	12	0.0185%
42X0	G	9	0.0139%
41X0	G	0	0.0000%
41X1	G	74	0.1139%
41X2	G	75	0.1155%
42X0	G	25	0.0385%
43X0	G	164	0.2525%
43X1	G	0	0.0000%
41X0	G	0	0.0000%
42X0	G	0	0.0000%
51X0	G	342	0.5265%
51X1	A	251	0.3864%
51X2	A	208	0.3202%
52X0	G	645	0.9930%
53X0	G	64	0.0985%
54X0	G	172	0.2648%
55X0	G	126	0.1940%
56X0	G	324	0.4988%
57X0	E	10	0.0154%
61X0	G	949	1.4611%
63X3	A	133	0.2048%
65X0	G	0	0.0000%
66X0	G	0	0.0000%
67X0	G	0	0.0000%
62X0	E	57	0.0878%
62X1	E	10	0.0154%
63X1	E	181	0.2787%
63X2	E	87	0.1339%
63X3	E	228	0.3510%
64X0	E	491	0.7559%

AD-A157 881

AN ANALYSIS OF THE EFFECTS OF VARYING MALE AND FEMALE
FORCE LEVELS ANNEX 1. (U) SYLLOGISTICS INC SPRINGFIELD.
VA S M MORRIS MAR 85 F49642-84-D-0038

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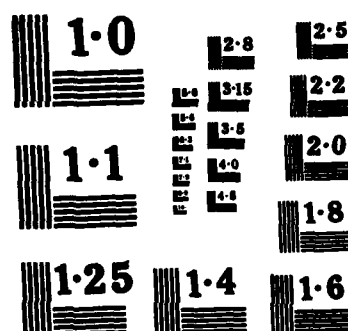
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NATIONAL BUREAU OF STANDARDS
MICROCOPY RESOLUTION TEST CHART

AFSC WEIGHTS

AFSC	Type	Accession Requirement	Percent of Total
304X1	E	83	0.1278%
304X4	E	428	0.6589%
304X5	E	69	0.1062%
304X6	E	203	0.3125%
305X4	E	418	0.6436%
306X0	E	287	0.4419%
306X1	E	0	0.0000%
306X2	E	201	0.3095%
307X0	E	88	0.1355%
309X0	E	101	0.1555%
316X0	E	253	0.3895%
316X1	E	0	0.0000%
316X2	E	57	0.0878%
316X3	E	87	0.1339%
321X0	E	8	0.0123%
321X1	E	117	0.1801%
321X2	E	0	0.0000%
322X2	E	78	0.1201%
323X1	E	0	0.0000%
323X2	E	0	0.0000%
323X3	E	0	0.0000%
324X0	E	353	0.5435%
325X0	E	252	0.3880%
325X1	E	321	0.4942%
326X0	E	45	0.0693%
326X3	E	107	0.1647%
326X4	E	445	0.6851%
326X5	E	53	0.0816%
326X6	E	152	0.2340%
326X7	E	108	0.1663%
326X8	E	128	0.1971%
328X0	E	122	0.1878%
328X1	E	179	0.2756%
328X2	E	15	0.0231%
328X3	E	298	0.4588%
328X4	E	163	0.2510%
328X5	E	26	0.0400%
341X1	E	0	0.0000%
341X2	E	19	0.0293%
341X4	E	209	0.3218%
341X6	E	87	0.1339%
341X7	E	9	0.0139%
361X0	M	106	0.1632%
361X1	M	120	0.1848%
362X1	E	254	0.3911%
362X3	E	30	0.0462%
362X4	E	174	0.2679%
391X0	G	45	0.0693%
392X0	G	268	0.4126%
404X0	E	62	0.0955%
404X1	E	15	0.0231%
423X0	E	559	0.8606%
423X1	M	194	0.2987%

Source: ESTIMATED FY1985 REQUIREMENTS

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AFSC WEIGHTS

AFSC	Type	Accession Requirement	Percent of Total
423X2	E	175	0.2694%
423X3	M	244	0.3757%
423X4	E	383	0.5897%
423X5	M	1671	2.5727%
426X1	M	0	0.0000%
426X2	M	1461	2.2494%
426X3	M	213	0.3279%
426X4	M	444	0.6836%
427X0	M	35	0.0539%
427X1	M	403	0.6205%
427X2	G	203	0.3125%
427X3	M	262	0.4034%
427X4	M	133	0.2048%
427X5	M	481	0.7405%
431X0	M	213	0.3279%
431X1	M	4041	6.2215%
431X2	M	2315	3.5642%
431X3	M	1629	2.5080%
431X4	M	11	0.0169%
443X0	M	97	0.1493%
445X0	E	100	0.1540%
445X1	M	0	0.0000%
461X0	M	1085	1.6705%
462X0	M	1816	2.7959%
463X0	M	264	0.4065%
464X0	M	133	0.2048%
472X0	M	159	0.2448%
472X1	M	288	0.4434%
472X2	M	330	0.5081%
472X3	M	0	0.0000%
472X4	A	0	0.0000%
511X0	G	524	0.8067%
511X1	G	76	0.1170%
542X0	E	47	0.0724%
542X1	E	178	0.2740%
542X2	M	445	0.6851%
545X0	E	316	0.4865%
545X1	M	50	0.0770%
545X2	E	186	0.2864%
545X3	E	0	0.0000%
551X0	M	166	0.2556%
551X1	M	0	0.0000%
552X0	M	318	0.4896%
552X1	M	80	0.1232%
552X2	M	159	0.2448%
552X4	M	0	0.0000%
552X5	M	216	0.3326%
553X0	G	230	0.3541%
554X0	A	0	0.0000%
555X0	G	57	0.0878%
566X0	G	138	0.2125%
566X1	M	220	0.3387%
571X0	G	1155	1.7782%

Source: ESTIMATED FY1985 REQUIREMENTS

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AFSC WEIGHTS

AFSC	Type	Accession Requirement	Percent of Total
591X0	M	0	0.0000%
591X1	M	0	0.0000%
602X0	A	205	0.3156%
602X1	A	146	0.2248%
602X2	G	38	0.0585%
603X0	M	790	1.2163%
605X0	A	151	0.2325%
605X1	G	775	1.1932%
611X0	A	324	0.4988%
612X0	G	10	0.0154%
612X1	A	313	0.4819%
622X0	G	954	1.4688%
631X0	G	1354	2.0846%
645X0	G	2280	3.5103%
645X1	G	1216	1.8722%
645X2	A	0	0.0000%
651X0	A	60	0.0924%
661X0	A	0	0.0000%
672X1	A	443	0.6820%
672X2	A	506	0.7790%
673X0	A	0	0.0000%
701X0	A	56	0.0862%
702X0	A	3209	4.9406%
703X0	G	68	0.1047%
705X0	A	0	0.0000%
732X0	A	1267	1.9507%
732X1	A	32	0.0493%
732X4	A	0	0.0000%
733X1	G	0	0.0000%
734X0	G	0	0.0000%
741X1	A	243	0.3741%
742X0	A	0	0.0000%
751X0	G	4	0.0062%
751X2	G	0	0.0000%
751X3	G	0	0.0000%
753X0	G	94	0.1447%
753X1	M	0	0.0000%
791X0	G	82	0.1262%
791X1	G	63	0.0970%
791X2	G	0	0.0000%
811X0	G	5618	8.6495%
811X2	G	1738	2.6758%
821X0	G	0	0.0000%
871X0	A	97	0.1493%
872X0	A	10	0.0154%
902X0	G	1972	3.0361%
902X1	G	64	0.0985%
902X2	G	273	0.4203%
903X0	G	263	0.4049%
903X1	G	0	0.0000%
905X0	G	141	0.2171%
906X0	G	546	0.8406%
907X0	G	174	0.2679%

Source: ESTIMATED FY1985 REQUIREMENTS

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AFSC WEIGHTS

AFSC	Type	Accession Requirement	Percent of Total
908X0	G	58	0.0893%
911X0	G	70	0.1078%
912X5	G	38	0.0585%
913X0	G	35	0.0539%
913X1	G	0	0.0000%
914X0	G	0	0.0000%
914X1	G	35	0.0539%
915X0	G	251	0.3864%
918X0	E	129	0.1986%
919X0	G	12	0.0185%
924X0	G	240	0.3695%
924X1	G	9	0.0139%
925X0	G	0	0.0000%
926X0	G	110	0.1694%
981X0	G	543	0.8360%
982X0	G	63	0.0970%
995X0	G	0	0.0000%
995X1	G	0	0.0000%
995X2	G	0	0.0000%
995X3	G	0	0.0000%
995X4	M	0	0.0000%
995X5	G	0	0.0000%
995X6	E	0	0.0000%
996X0	G	0	0.0000%
996X1	G	0	0.0000%
996X2	G	0	0.0000%
996X3	A	0	0.0000%
996X4	A	0	0.0000%
996X5	G	0	0.0000%
996X7	G	0	0.0000%
996X8	G	0	0.0000%
997X1	A	0	0.0000%
997X2	G	0	0.0000%
Total		64952	100.0000%

END

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